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**Defense Integrated Military Human Resources System
(Personnel and Pay)
(DIMHRS (Pers/Pay))**

**DIMHRS PeopleSoft Supportability:
Global Analysis Report**



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Presented to:

Joint Requirements and Integration Office

and

DIMHRS (Pers/Pay) Joint Program Management Office

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EXECUTIVE SUMMARY

Introduction

The Defense Integrated Military Human Resources System (Personnel and Pay) [DIMHRS (Pers/Pay)] program was established to address the critical personnel and pay needs of the military. The objective of the program is to build a single, integrated personnel and pay management system that will enable transformation of military personnel and pay management. It will provide Service headquarters with an enhanced capability to manage their forces, as well as provide individual Service Members with simplified, easily available personnel and pay support. The system will enhance mission support to the warfighter and Service Departments by incorporating best practices, eliminating or reducing data collection burdens, solving operational problems, conserving resources, improving delivery of services, and enhancing readiness. Military personnel processes have been analyzed to ensure that DIMHRS (Pers/Pay) addresses major deficiencies in the delivery of military personnel and pay services. The deficiencies identified are the direct result of the inability of myriad current systems with multiple, complex interfaces to fully support current business process requirements. These deficiencies continue to impact operations and the overall quality of service provided to Service Members, and must be corrected to ensure that they receive timely and accurate personnel and pay support to include: correct and timely pay, accurate credit for service, and appropriate benefits. The DIMHRS (Pers/Pay) Operational Requirements Document (ORD) for Milestone II, dated 2 July 2001 provides the high level requirements of the program. As part of ongoing DIMHRS analysis efforts to ensure that DIMHRS (Pers/Pay) provides the core DoD functional processes and capabilities required to support the military personnel and pay life cycle, the DIMHRS program has undertaken a Comprehensive Analysis process to assess the PeopleSoft product to determine the degree to which a commercial product can meet DIMHRS program needs.

Global Payroll Analysis Objectives

The purpose of this analysis was to evaluate PeopleSoft capabilities, using their integrated Global Payroll module, to support military personnel and pay functional requirements and provide additional input to the on-going Comprehensive Analysis effort. This analysis was not intended to be exhaustive; rather, it addressed those core pay requirements that are considered critical to the overall success of the DIMHRS program. In addition to addressing gap issues and deficiencies identified with Payroll for North America, this analysis conducted a general review of PeopleSoft Global Payroll's processing functionality. Of equal importance are the integrated product's business practices for processing pay changes, enforcing pay eligibility rules and triggers, and performing pay computation. Since DIMHRS will support over 3 million active duty and reserve members, processes must be automated to preclude requirements for additional manpower, increased job skills, or manual computation. It must also support DoD internal control requirements, reduce pay discrepancies and provide one-step data entry. This analysis was conducted as an integrated function of the Comprehensive Analysis effort.

The specific objectives of this analysis were to:

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- ◆ Familiarize those new to the Comprehensive Analysis effort and those involved with the analysis with PeopleSoft functionality as it relates to the use of Global Payroll.
- ◆ Familiarize the DIMHRS program functional and technical staff with PeopleSoft procedures and facilities required to create, change or process military pay entitlements, allowances, deductions, eligibility rules and computation rules.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate variable rate entitlements or allowances based on several factors such as grade, creditable years of service, location, proficiency and dependent status.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate proration of entitlements based on pay rate changes, partial month service and the 30-day pay calendar.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate installment-based entitlements and allowances.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate existing military payroll deductions.
- ◆ Understand and verify the extent to which PeopleSoft supports gross to net payroll balancing. Understand the extent to which PeopleSoft supports specific earnings and deductions.
- ◆ Understand and verify the extent to which PeopleSoft can be used to implement automated event triggers and eligibility validation.
- ◆ Understand and verify the extent to which PeopleSoft can automatically detect the need for and initiate retroactive processing based upon changes to a member's pay or personnel record.

Scope and Methodology

Planning for Global Payroll analysis began in July 2002. The DFAS Global Payroll Analysis Plan was drafted by the DFAS DIMHRS Pay Project Office (DDPO) and subsequently reviewed and validated by the Joint Program Management Office (JPMO), the Joint Requirements and Integration Office (JR&IO), the DFAS Military and Civilian Pay Services (M&CPS) and PeopleSoft (Appendix B). The Global Payroll Analysis Charter, prepared by JR&IO, further defined objectives, performance measures, scope, assumptions, success factors, roles and responsibilities and project administration (Appendix A). A Global Payroll Analysis Team comprised of functional and technical representatives from JPMO, JR&IO, DFAS and PeopleSoft was formed to perform the analysis.

The pay scenarios used for the analysis were intended to be representative of business rules, Information Requirements and tables to ascertain PeopleSoft capabilities to support DoD functional requirements. The pay scenarios addressed core requirements critical to the overall success of the DIMHRS program and deficiencies identified with the PeopleSoft Payroll for North America. The following is a high-level overview of requirements and scope within the scenarios:

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- ◆ Pay Scenarios included 24 scenarios based on life-cycle events to include accession, service date anniversary, permanent change of station, promotion, retroactive changes, full and partial month eligibility, separation and active duty over 30-days, active duty less than 30-days and Reserve inactive duty training. Note: DoD payroll systems currently support over 230 different earnings, deductions and process categories.
- ◆ Pay Groups included Active Duty and Reserve Army, Air Force, Navy and Marine Corps personnel.
- ◆ Pay Calendars: Pay calculation overlapped a 28-day, 30-day and 31-day calendar month and included six payroll cycles, using weekly and semi-monthly pay periods.
- ◆ Pay Types included 15 military pay earnings/deductions based on several Human Resource events or triggers to include accessions, promotions, service date anniversaries, location changes, dependency changes, competency updates and active duty types. Note: DoD payroll systems currently support over 230 pay types and 6,000 pay authorization and computation business rules.
- ◆ Pay Tables included 12 pay rate tables to support multiple rate determination factors such as pay grade, marital status, creditable service, location, proficiency, number-of-dependents and branch of service. Note: DoD payroll systems currently support over 109 pay rate tables.
- ◆ Pay Accumulators included 3 accumulators to support pay calculation for taxable income, combat zone nontaxable income and allotable income. Note: DoD payroll systems currently support several temporary and permanent accumulators to track earnings, deductions, taxes and allotments.
- ◆ Information Requirements: Approximately 50 unique HRMS data elements and applicable domain values were required to authorize and compute military pay earnings and deductions. Note: DoD payroll systems currently support over 1,800 data elements to define pay authorization and computation.

Lessons Learned

The following issues came to light during the set-up phase are presented as lessons learned for the next phase of analysis:

- ◆ Up-Front Design Phase

The up-front analysis process to design Global setup is critical. As much as possible before getting into the actual set-up detail, the analysis must take into account all aspects of a particular process to be tested such as longevity increases or pay type. If the process is scenario specific, the initial set-ups will most likely not work properly in subsequent more complex scenarios. In the latter instances, formulas, variables, brackets, arrays and the like will have to be diagnosed for flaws and modified. This becomes a time-consuming maintenance issue and calls into question the simpler set-ups that initially produced acceptable results. For example, in our analysis, the initial set-ups to derive dependent status and number of member dependents for OHA, OCOLA and BAH worked for the first test cycle. But as later

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cycles became more complex those initial set-ups did not consistently return expected results and had to be modified. That extra effort was useful to get an exposure to the Global troubleshooting process, and demonstrated the product's considerable power and flexibility to revamp quickly problematic configurations, but more comprehensively thought out solutions up front will save considerable time and frustration later on.

◆ Gross-to-Net Revalidation of All Cycles

Even the best thought out design required some modification initially. Whatever the extent of modification ultimately required, however, running a final gross-to-net validation is recommended. The objective during Global Analysis was to verify that the modified, more complex set-ups still addressed the earlier simpler situations. Therefore, time for such a validation exercise should be built into the analysis schedule.

◆ Incorporating Business Rules with Scenario Packages

Scenario scripts provided to PeopleSoft Consulting before the analysis did not include the detailed business rules underlying the scenario processes and pay types to be tested. This created some misunderstanding at the detailed set-up level about what each set-up needed to accomplish the agreed upon test objective. The additional discussion was time consuming, and often resulted in the perception that the scope of the analysis was expanding. For future analysis, the Team recommend submitting the business rules along with the scenario scripts. That will provide a fuller understanding, of what needs to be understood and addressed at the detailed set-up level. The business rules are primarily personnel business rules and this illustrates the difficulties of dealing with pay in isolation from human resources.

◆ Integration with Human Resources

The benefits Global has to offer are heavily dependent on HR processes and set-ups. While this analysis was pay-centric, and HR set-ups were derived from earlier analysis, set-up decisions for pay and personnel must be integrated to ensure the objectives of both the Personnel and Pay communities are being addressed. This is particularly true when considering which HR areas (e.g., Position Data, Manage Competencies, Job Data, Personal Data, etc.) are to be used as triggers for pay authorization and computation.

◆ Team Continuity

The learning for Global, as well as that of consultants new to military pay, is steep. It is critical that some or all of the DoD and PeopleSoft Consulting staff that have participated in analysis efforts to date be carried over into subsequent phases. The common and complimentary understandings and knowledge gained from previous efforts will benefit people new to the process and save time. This further illustrates the need to ensure integration of human resources and pay to every stage of design and development.

Discussion of Gaps

◆ Automating Pay Triggers and Eligibility Validation

In any payroll product, triggering is the capability of the application to programmatically “detect” or “recognize” changes in Personnel or other such pay-impacting factors, and then, again programmatically, adjust eligibility and computation profiles as needed. In this analysis, the Team demonstrated trigger capability primarily by inserting Personnel Actions on PeopleSoft HRMS Job Data. There are three essential elements to triggering: the table or component must be effective dated; employee ID (i.e., PeopleSoft HRMS EMPLID) must be the primary key; and there must be a link to enabling PeopleCode. A number of key tables (e.g., Competency, Contract Data) are not so structured. Thus the Team identified that aspect of the capability as a Gap for those tables.

The important point is that in a development/implementation phase the scope of the trigger functionality will have to be more fully explored—where it can be generated where it cannot—and where applicable the needed code will have to be added to additional tables according to identified requirements. Some of the inconsistent results described above could be attributed to scope limitations not allowing development of new objects, and consequently, trying to use available PeopleSoft tables and screens that had already been set-up or configured, even when they were not designed to be used for these purposes. DIMHRS will be able to use the appropriate tables or more fully leverage existing PeopleSoft database objects.

◆ Retroactivity

Retroactive processing requires that processing Personnel or other pay-impacting actions to the member record also updates other logically related pay authorization and computation factors to yield the correct pay-ready profile in light of the most recent change processed. The DIMHRS Operational Requirements Document (ORD) identifies this as a processing feature that the new environment must replicate. The analysis identified and documented one situation where this did not occur.

The Team processed a retroactive promotion action to PeopleSoft HRMS employee Job Data, effective 1 July 98. The record already showed a hire effective 5 May 98 and a transfer effective 1 October 98. The retroactive promotion posted the higher rate to the Job data, as of 1 July, but the higher rate did not carry forward beyond the 1 Oct 98 effective date of the Transfer. The transfer action still showed the compensation rate for the pre-promotion grade. That results in the employee’s being paid at the higher Basic Pay rate only from the date of the promotion (7/1/98) to the transfer date, but thereafter underpaid at the incorrect pre-promotion grade because that is the rate linked to the most current (transfer) row.

◆ Forwarding Method versus Corrective Method

Global delivers two methods of retroactive processing. The Forwarding method’s distinguishing feature is that it carries all prior period adjustments to the current period and displays on the current Results Calendars only the net adjustment. The Forwarding Method

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is the one PSC recommends because it is the method that better fits with tax processing. The Corrective Method on the other hand records and displays all prior period adjustments, in their entirety, in the Results Calendar for the retro pay periods in question.

The Team tried each in the course of this analysis. With regard to Forwarding, the net adjustments did display on the current calendar as advertised, but just that netting method could cause accounting problems when the Team needed to impact military pay appropriations for gross amounts. As for the purported tax advantage, because Global has not yet delivered the tax-processing modules, the quality of integration with tax processing could not be tested and validated. The Corrective Method displayed data in full amounts in prior periods as described above; that is beneficial for accounting and reporting requirements. However the Team discovered that the accumulators for the prior periods were not updated for the retroactive adjustments; the adjustments were all reflected in the current period accumulator buckets. That, especially if the retroactive period crosses calendar years, could have tax reporting implications.

Conclusions

The PeopleSoft Global Payroll functionality supports an integrated personnel and pay environment. Global Payroll is a rules-based system with user-defined triggers, segmentation, formulas, arrays and brackets to define and support military pay authorization and computation rules. Processing rules can be defined to automatically start, stop and change pay earnings and deductions based on personnel events or data changes. Computation rules can be constructed to support either 28, 30 or 31 day proration rules for different active duty periods and Reserve Inactive Duty Training. Global Payroll also supports retroactive payments, accumulators and pay changes based on service date anniversaries. Several Gap Issues were identified regarding pay triggers, retroactivity, and data edits or validation. These Gaps are easily fixed using PeopleSoft utilities such as mass change or batch processing, or PeopleSoft developmental tools such as PeopleCode, PeopleTools and Application Engine. Several processes to include the DC II interface, benchmarking, system internal controls, and functionality to be included in the Global Payroll US Country Extension require further analysis when delivered to determine if these processes meet DoD performance, system and functional requirements and standards.

With few exceptions Global results matched expected results, as reflected in the Scenario results and outcomes detailed in this report. In some cases, numerous runs and modifications to set-ups were required before the process ran satisfactorily, which was to be expected from an initial evaluation. The analysis also highlighted a number of gaps, described throughout, the main ones being Global Triggering, Retroactive processing-related capabilities (discussed in the report) and the data Gap. This analysis also identified that Global does not display in Pay Calendars the segment or slice begin and end dates where pay computation factors changed during the period. That has accounting and reporting implications. Additional research is required here to determine if the dates are in fact maintained within a history section of payroll processing results but just do not display on the Results Calendar.

Still, scenario execution demonstrated that Global Payroll could support the major aspects of military pay processing. This included:

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- ◆ computing variable (all Scenarios) and fixed rate entitlements (Scenario 4 Hostile Fire Pay) based on pay computation factors;
- ◆ computing installment-based entitlement (Scenario 3 Selective Reenlistment Bonus) based on pay computation factors;
- ◆ establishing and taking deductions either on a daily rate (BAS Discounted Meal Rate in Scenarios 2 through 5) or based on a fixed rate (SGLI or AFRH in all scenarios);
- ◆ adjusting fixed-rate deduction amounts to cover either the entire fixed rate due, or part of it, based on whether the member has been present for all pay periods for the month (all scenarios);
- ◆ computing Reserve/Guard drill pay for Inactive Duty Training (IDT) , Active Duty Short Tours, and Active Duty Long Tours (Scenario 4);
- ◆ capturing non-taxable items in a Combat Zone-based situation (Scenario 4);
- ◆ balancing payrolls gross-to-net (all scenarios).

Global Analysis Process

The Global Payroll module of Peoplesoft has successfully shown the flexibility needed to determine eligibility and compute entitlements as per the scenarios designed for this analysis. The various component tools in global payroll allow a number of different ways to accomplish complex computations and to accommodate requirements that are unique to military pay.

Analysis Results – Summary by Category

The pay scenarios used in this analysis were a representative sample of the military pay business rules and addressed core requirements critical to the overall success of the DIMHRS program. All setup, configuration, data mapping, HRMS and payroll processes were restricted to PeopleSoft out-of-the-box functionality. Delivered PeopleSoft Global functionality such as segmentation, triggers, formulas, arrays and variables were constructed to support military pay business rules. The following summarizes final results and conclusions from these pay scenarios. Analysis results focused more on conceptual fit, rather than an exact fit, since the team was limited to out-of-the-box functionality and a representative sampling of business rules. Section 3 of this report includes detailed scenario objectives, level-of-effort to process and analyze scenarios and results. Section 2 addresses Global Payroll setup, configuration, level-of-effort to analyze and rework configuration requirements and results.

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Requirement	Fit/ Gap	Results
Variable Rate Pays		
Monthly and daily rates for military pay entitlements are based on multiple factors such as grade, creditable service, location, marital status, proficiency and number of dependents. The system should automatically determine these rates based on entries in the personnel record and use these rates in payroll computation	FIT	The scenarios addressed several variable pay rates for Basic Pay, BAH, BAS, Diving Duty, Medical Pay, COLA, OHA, Hostile Fire Pay and SRB. These rates were loaded to existing PeopleSoft tables such as the Base Compensation and Benefits Rates tables. Formulas and arrays were constructed to successfully lookup and determine pay rates based on personnel data elements, then use these rates for payroll computation.
Prorating Monthly Entitlements		
For periods of active duty of 30-days or more, payments are based on a 30-day month regardless of the actual number of calendar days in the month. For periods of active duty less than 30-days, payments are based on the actual number of days served during the month. Daily rates for monthly entitlements are based on a 30-day month and proration is required if one or more of the factors used to authorized variable rate pays (grade, location, marital status) change during the month.	FIT	The scenarios addressed several active duty periods for over 30 days, Reserve duty less than 30 days and Reserve inactive duty training. Members were accessed during the month and Basic Pay, BAH, BAS, Diving Duty, Medical Pay, COLA, OHA, Hostile Fire Pay and SRB started, stopped or changed to force both pay eligibility and proration for partial months. Formulas and arrays were constructed to successfully compute daily rates based on a 30-day month, determine the number-of-days payable for each pay type, then pass this information for payroll computation.
Prorating Monthly Deductions		
Monthly payroll deductions such as allotments or debts are not prorated; rather, equal amounts are deducted from the member's mid-month and end-of-month pay. Some deductions are not suspended if monies are not available, while others are put in arrears. Some deductions are prorated on a daily basis based on a change in eligibility.	FIT	The scenarios addressed several active duty periods for over 30 days, Reserve duty less than 30 days and Reserve inactive duty training. Members were accessed during the month and SGLI, AFRH and discounted meals deduction started, stopped or changed to force both full and prorated deductions. Formulas, accumulators and arrays were constructed to successfully determine deduction amounts or arrears, then pass this information for payroll computation.
Automating Pay Triggers and Eligibility Validation		
The system must automatically start, change or stop entitlements or deductions based on personnel events or data changes such as accessions, promotion, dependency status, location and competency. The DoD payroll systems currently support over 230 pay types or processes, 1800 data elements and 6,000 business rules to define military pay eligibility, authorization and computation.	GAP	To use on-data changes as a trigger for system processes, the applicable record-field must be configured to facilitate trigger definition. The Global Payroll core application delivers 22 record-fields configured to support trigger definition. To configure additional record-fields, PeopleCode must be added to the applicable record-field in the database. The user adding PeopleCode to the core application could impact future version changes.
	GAP	Triggers in PeopleSoft are generated only when there are changes to payee records that use the Employee ID as the primary key structure, and triggers can only be defined with effective dated records, including records with begin and stop dates. PeopleSoft uses several tables to store data and many tables do not use the Employee ID as the primary key

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Requirement	Fit/ Gap	Results
		structure, or records are not effective dated. As such, using on-line data changes to automatically start, stop or change all entitlements or deductions is limited.
	FIT	Notwithstanding the Gaps identified in this category, the team successfully demonstrated PeopleSoft functionality to trigger pay changes based on personnel events and data changes. A work-around was used to add personnel changes to the JOB record, a delivered PeopleSoft trigger definition table. Trigger definitions were setup to detect and record on-line personnel changes to the member's pay grade, location, marital status and competency. The system then segmented pay eligibility periods based on these data changes. Formula and arrays were constructed for Basic Pay, BAH, BAS, Diving Duty, Medical Pay, COLA and OHA to successfully prorate and compute pay for each eligibility period.
Retroactive Processing		
Retroactive processing is required in a wide variety of circumstances such as legislative or regulation changes, late reporting of personnel actions, errors in reporting, and timing required to meet Federal Reserve payroll processing windows. The system must automatically process these retroactive changes updating all pay entitlements or deductions impacted by these changes.	FIT	The scenarios addressed several retroactive accessions requiring retroactive "start" transactions for Basic Pay, BAS and Medical Pay. In these cases, entitlements had not previously been paid. Retroactive triggers, formulas and arrays were constructed to successfully compute daily rates based on a 30-day month, determine the number-of-days payable for each pay type, then pass this information for payroll computation. The members' personnel/pay records were properly updated to continue payments in future pay cycles.
	GAP	A retroactive "change" to diving pay was processed changing the member's diver competency rating resulting in a retroactive increase to a previously paid entitlement. This system successfully computed the retroactive payment; however, it did not update the personnel/pay record so that future payments are based on the higher rate. This is a delivered PeopleSoft process and the user is expected to update both the retroactive change and the current job record. This process has serious implications for military pay processing and could lead to additional workload, underpayments, overpayments and rework. For example, if the member was retroactively promoted, the system recomputes all entitlements that uses the pay grade as an eligibility or computation factor (i.e., Basic Pay, BAH, COLA, etc.). The user must then update the personnel/pay record for each entitlement so that future payments are correct.
Data Edits and Validation		
The system should automatically validate all personnel data changes for format, consistency, and values at time of input to prevent erroneous updates to the member's personnel/pay record.	GAP	Delivered PeopleSoft functionality does not support edits or validation rules for data elements or domain values unique to the military personnel system. For example, changing a member's pay grade from 31 (Airman) to pay grade 10 (General), or updating eligibility factors use to authorize both With Dependent and Single Rate Basic Allowance for Housing. Delivered database utilities do provide simple

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Requirement	Fit/ Gap	Results
		validation edits but do not address complex edits required for military personnel processing. Global Payroll formulas and arrays can be constructed to ignore erroneous data to prevent overpayment; however, this validation is an after-the-fact process since the records has already been updated with the erroneous data. Batch processes can be developed to identify erroneous data entries and generate a workflow notice for someone to correct the data. Again, this is an after-the-fact process and there's no guarantee that someone will correct the erroneous data. On-line data edits and validation are required to ensure database accuracy, prevent over or under payments and potential rework.

Analysis Results – Summary by Pay Type

The following summarizes analysis results by pay type. Section 3 of this report includes detailed scenario objectives, level-of-effort to process and analyze scenarios and results. Section 2 addresses Global Payroll setup, configuration, level-of-effort to analyze and rework configuration requirements and results.

Pay Type	Pay Computation Fit	Pay Authorization Fit	Data Fit		
			System Data	Service Member Data	Validation Edits
Entitlements					
Basic Pay					
Active Duty > 30-days	Yes	Yes	Partial	Partial	No
IDT	Yes	Yes	Partial	Partial	No
Active Duty < 30-days	Yes	Yes	Partial	Partial	No
Long Tour	Yes	Yes	Partial	Partial	No
BAH	Yes	Yes	No	No	No
BAS	Yes	Yes	Partial	Partial	No
Overseas COLA	Yes	Yes	No	No	No
Overseas Housing Allowance	Yes	Yes	No	No	No
Diving Duty Pay	Yes	Yes	No	Yes	No
Medical Variable Special Pay	Yes	Yes	No	No	No
Hostile Fire Pay	Yes	Yes	No	No	No
SRB	Yes	Yes	No	No	No
Deductions					
AFRH	Yes	Yes	No	No	No
SGLI	Yes	Yes	Yes	Yes	Yes
BAS Discounted Meals	Yes	Yes	No	No	No

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Pay Type: Lists all pay entitlements and deductions include in the Global Payroll analysis.

Pay Computation: Indicates if formulas and arrays were successfully constructed to support 30-day proration, variable rate pays and payroll computation.

Pay Authorization: Indicates if triggers, formulas and arrays were successfully defined or constructed to start, stop and change entitlements and deductions based on personnel events or data changes.

Data Fit: Indicates if existing PeopleSoft data elements were identified that correctly defined the purpose, data name and validation edits required to support pay eligibility and computation factors. For this analysis, the team was limited to PeopleSoft out-of-the box functionality and could not create or change PeopleSoft tables, data elements or objects to specifically define military unique data elements.

Analysis Results – Summary by Scenario

The following summarizes analysis results by pay scenario and if objectives were met. Even though objectives were met, Gaps were identified regarding retroactive payments and triggers, and additional analysis is required in some areas. Section 3 of this report includes detailed scenario objectives, level-of-effort to process and analyze scenarios and results. Section 2 addresses Global Payroll setup, configuration, level-of-effort to analyze and rework configuration requirements and results.

No.	Result	Objective	Expected Results
1-1	Met	Accession – Medical Officer	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes pay for partial 28-day month
1-2	Met	Start Variable Medical Special Pay (VSP) – Medical Officer	Verify system automatically starts Medical VSP based on updating HR record
1-3	Met	Change Medical Variable Special Pay (VSP) – Medical Officer	Verify system automatically changes pay entitlements based on updating HR record and triggers rate change based on medical service date
1-4	Met	Longevity – Medical Officer	Verify system automatically updates Basic Pay rates based on Basic Pay Date anniversary and pay deduction based on Tax Election change
1-5	Met	Normal Payroll and BAH Edits – Medical Officer	Verify system automatically computes normal payroll and prevents concurrent payment of Dependent BAH and Single BAH
1-6	Met	Retroactive Hire	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes pay for prior and current month, and prorate partial month

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No.	Result	Objective	Expected Results
2-1	Met	Accession – Enlisted Prior Service	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes pay for partial 28-day month
2-2	Met	Start Diving Duty Pay (Retroactive) and Longevity Increase	Verify system automatically starts pay entitlements based on updating HR record
2-3	Met	Correct Retroactive Diving Duty Pay and compute payroll	Verify system automatically starts and corrects pay entitlements based on updating HR record
2-4	Met	Change BAH	Verify system automatically starts pay entitlements based on updating HR record
2-5	Met	Retroactive BAS update and Normal Payroll	Verify system automatically computes normal payroll and pay retroactive BAS
2-6	Met	Expanded Diving Duty	Establish eligibility and compute Dive Duty pay based on real-life multiple authorization factors
3-1	Met	Accession – Enlisted Non-Prior Service	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes pay for partial 28-day month
3-2	Met	Start Diving Duty Pay	Verify system automatically starts pay entitlements based on updating HR record
3-3	Met	Reassigned Overseas and Start COLA and BAS	Verify system automatically starts pay entitlements based on updating HR record
3-4	Met	Promotion	Verify system automatically updates pay entitlements based on updating HR record
3-5	Met	SRB Payment and Payroll	Verify system automatically computes Selective Reenlistment Bonus and payroll
3-6	Met	Access new member month of May	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and pro-rates pay for partial month
4-1/2	Met	Accession – Inactive Reserve/Report IDT	Verify system setups pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes Inactive Duty Training
4-3	Met	Report Active Duty less than 30 Days– Inactive Reserve	Verify system pays members for Active Duty Periods less than 30 days
4-4	Met	Report Active Duty more than 30 Days– Active Reserve	Verify system pays members for Active Duty Periods more than 30 days
4-5	Met	Report Member to Hostile File Area– Active Reserve	Verify system pays members for Active Duty Periods more than 30 days in Hostile Fire Area

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No.	Result	Objective	Expected Results
4-6	Met	Report Member Departure from Hostile File Area– Active Reserve	Verify system separates members and changes status
4-7	Met	Report Multiple Drill Types over 5 weekly Pay periods	Compute pays due for tours performed within respective pay periods

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SECTION 1

1. INTRODUCTION

1.1 Overview

The purpose of this analysis was to evaluate PeopleSoft Global Payroll capabilities to support military personnel and pay functional requirements and to provide additional pay/compensation input to the on-going DIMHRS Comprehensive Analysis efforts. The results of the initial analysis of the PeopleSoft HRMS and PeopleSoft's North American Payroll product, documented in JR&IO's Initial Analysis Report, addressed deficiencies in the North American Payroll product that limited the product's capability to support DoD pay requirements. While there were several areas within PeopleSoft Payroll for North America and Time and Labor that met requirements, neither PeopleSoft Payroll for North America or Time and Labor provided support for fully automated computation of military pay entitlements and deductions. These critical deficiencies are described in the Initial Analysis Report. As a result of the Initial Analysis results, PeopleSoft provided a new payroll product, PeopleSoft Global Payroll, to DoD for evaluation. The Global Payroll analysis provides a general review of PeopleSoft's Global Payroll processing functionality and the integration of Human Resources and payroll processes. Of equal importance are the integrated product's business practices for processing pay changes, enforcing pay eligibility rules and triggers, and pay computation. Since DIMHRS will support over three (3) million active duty and reserve members, processes must be automated to preclude requirements for additional manpower, increased job skills, or manual computation. It must also support DoD internal control requirements, reduce pay discrepancies and provide one-step data entry. This analysis was conducted as an integrated function of the Comprehensive Analysis effort, to evaluate PeopleSoft's Global Payroll product, a product that has been deployed extensively abroad, but not yet in the United States.

1.2 Background

The Global Analysis is intended to provide a detailed comparison between current DoD military pay regulatory and functional business processes and the facilities provided by PeopleSoft Human Resources and Global Payroll components. The following documents were used as the basis for the analysis:

- ◆ The DIMHRS Joint Initial Analysis Report dated 17 August 2001
- ◆ United States Code Titles 5, 10 and 37: These statutes form the legislative basis for all military entitlements.
- ◆ The Department of Defense Financial Management Regulation (DoDFMR): Within the Department of Defense, the specific details of military pay compensation are provided in DoD 7000-14.R, Financial Management Regulation, Volume 7A, "Military Pay Policy and Procedures – Active Duty and Reserve Pay". This regulation provides provisions for

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entitlements, deductions, and collections, and establishes Department of Defense policy on the pay and allowances of military personnel. The Under Secretary of Defense (Comptroller) issues this regulation in coordination with the Director, Defense Finance and Accounting Service. The provisions of the regulation apply to all Department of Defense activities and serve as the basis for military pay entitlement implementation by the Military Services.

- ◆ The Joint Federal Travel Regulation (JFTR): The JFTR provides statutory provisions for eligibility and computation requirements for overseas station allowances. The provisions of the regulation apply to all Department of Defense activities and are the sole basis for military pay entitlement implementation by the Military Services.
- ◆ The Operational Requirement Document (ORD) dated 2 July 2001: The ORD provides the overarching mission, goals, requirements, and performance parameters for the DIMHRS Per/Pay System.

1.2.1 COTS Payroll Product Selection

- ◆ The Global Payroll Analysis objective was to evaluate a commercial software product, PeopleSoft's Global Payroll, advertised as a fully integrated human resources and payroll functionality to determine if the commercial product could support DoD functional business processes and requirements. This analysis effort evaluated the following PeopleSoft product characteristics (Draft) (Non-Functional Requirements Global Payroll v8).

1.3 Scope

The scope of this Global Payroll Analysis is limited to the 24 scenarios developed by DFAS and validated by JR&IO and JPMO. This includes all of the necessary configuration and setup to support each of the mutually agreed upon scripts. A listing of the analysis output, which will be turned over to the Joint Program Management Office are:

- ◆ List of PeopleSoft foundation tables configured to support the mutually agreed upon scripts and the values used for testing.
- ◆ Detailed description of configuration of PeopleSoft Global Payroll Information Requirements (elements) used to support the mutually agreed upon scripts.
- ◆ Identification of issues related to the scenarios defined in this plan.
- ◆ Copies of screen prints made during execution of the analysis are included in Appendix E when applicable to document and validate setup, configuration and payroll processing results. Screen prints are appended to Scenario results as a product of the Global Payroll analysis effort.
- ◆ Identification of issues that must be resolved during the development and integration process. Processes so identified will not be tested in this analysis plan.

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- ◆ Identification of functionality to be supported by the PeopleSoft country extension to PeopleSoft Global Payroll will be included if available, but will not be tested in this analysis plan.

1.4 Objectives

The specific objectives of this analysis were to:

- ◆ Familiarize those new to the Comprehensive Analysis effort and those involved with the analysis with PeopleSoft functionality as it relates to the use of Global Payroll.
- ◆ Familiarize the DIMHRS program functional and technical staff with PeopleSoft procedures and facilities required to create, change or process military pay entitlements, allowances, deductions, eligibility rules and computation rules.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate variable rate entitlements or allowances based on several factors such as grade, creditable years of service, location, proficiency and dependent status.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate proration of entitlements based on pay rate changes, partial month service and the 30-day pay calendar.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate installment-based entitlements and allowances.
- ◆ Understand and verify the extent to which PeopleSoft can accommodate existing military payroll deductions.
- ◆ Understand and verify the extent to which PeopleSoft supports gross to net payroll balancing. Understand the extent to which PeopleSoft supports specific earnings and deductions.
- ◆ Understand and verify the extent to which PeopleSoft can be used to implement automated event triggers and eligibility validation.
- ◆ Understand and verify the extent to which PeopleSoft can automatically detect the need for and initiate retroactive processing based upon changes to a member's pay or personnel record.

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SECTION 2

2. METHODOLOGY

Planning for Global Payroll analysis began in July 2002. The DFAS Global Payroll Analysis Plan was drafted by the DFAS DIMHRS and subsequently reviewed and validated by the Joint Program Management Office (JPMO), the Joint Requirements and Integration Office (JR&IO), the DFAS Military and Civilian Pay Services (M&CPS) and PeopleSoft (Appendix B).

The Global Payroll Analysis Charter, prepared by JR&IO, further defined objectives, performance measures, scope, assumptions, success factors, roles and responsibilities and project administration (Appendix A). A Global Payroll Analysis Team comprised of functional and technical representatives from JPMO, JR&IO, DFAS and PeopleSoft was formed to perform the analysis. The Global Payroll Analysis was conducted at the JR&IO facility in Arlington, VA.

The pay scenarios used for the analysis provide a representative sample of business rules, Information Requirements and tables necessary to ascertain PeopleSoft capabilities to support DoD functional requirements. The scenarios were chosen to evaluate the integration of HRMS and payroll functionality as well as to address core pay requirements critical to the overall success of the DIMHRS program. The scenarios also addressed deficiencies identified with PeopleSoft Payroll for North America during Initial Analysis. The following is a high-level overview of Scenario scope and requirements. A detailed description of pay scenarios are contained in this section. Scenario findings and outcomes are contained in Section 3.

- ◆ Pay Scenarios include 24 scenarios based on life-cycle events to include accession, service date anniversary, permanent change of station, promotion, retroactive changes, full and partial month eligibility, separation and active duty over 30-days, active duty less than 30-days and Reserve inactive duty training. Note: DoD payroll systems currently support over 230 different earnings, deductions and process categories.
- ◆ Pay Groups include Active Duty and Reserve Army, Air Force, Navy and Marine Corps personnel.
- ◆ Pay Calendars: Pay calculation overlaps a 28-day, 30-day and 31-day calendar month and included six payroll cycles, using weekly and semi-monthly pay periods.
- ◆ Pay Types included 15 military pay earnings/deductions based on several Human Resource events or triggers to include accessions, promotions, service date anniversaries, location changes, dependency changes, competency updates and active duty types. Note: DoD payroll systems currently support over 230 pay types and 6,000 pay authorization and computation business rules.
- ◆ Pay Tables include 12 pay rate tables to support multiple rate determination factors such as pay grade, marital status, creditable service, location, proficiency, number-of-dependents and branch of service. Note: DoD payroll systems currently support over 109 pay rate tables.

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- ◆ Pay Accumulators include 3 accumulators to support pay calculation for taxable income, combat zone nontaxable income and allotable income. Note: DoD payroll systems currently support several temporary and permanent accumulators to track earnings, deductions, taxes and allotments.
- ◆ Information Requirements: Approximately 50 unique HRMS data elements and applicable domain values were required to authorize and compute military pay earnings and deductions. Note: DoD payroll systems currently support over 1,800 data elements to define pay authorization and computation.

2.1 Team Composition

The Global Payroll Analysis Team was comprised of functional and technical representatives from the DIMHRS Joint Program Management Office (JPMO), Joint Requirements and Integration Office (JR&IO), DFAS, and PeopleSoft Consulting. The organizations represented provided specific expertise and leadership to the Global Payroll Analysis effort as described below.

- ◆ Team Leaders: The JR&IO served as project lead for the analysis. Since the focus of this analysis was an evaluation of PeopleSoft's Global Payroll capability to meet the Department's payroll needs, the DFAS led the effort to produce scripts in coordination with the JR&IO and the JPMO. DFAS arranged for appropriate DFAS internal resources from Military and Civilian Pay Services (MCPS) and Technology Services Organization to support this effort.
- ◆ Team Members: Team Members were selected from JR&IO, DFAS and Military and Civilian Pay Services (MCPS) and were dedicated and committed to the entire analysis effort. Team members were pay and personnel Subject Matter Experts, both functionally and technically knowledgeable about the DIMHRS Business processes and Personnel/ Pay legacy systems. Team members were empowered to make decisions regarding Scenario execution. Team members had appropriate levels of PeopleSoft training consistent with their role on the project team.
- ◆ PeopleSoft Consultants: PeopleSoft consultants assisted and advised Team Members during the entire period of the analysis and provided product expertise for HRMS/Global Payroll setup, Human Resources and Global Payroll.
- ◆ Joint Requirements and Integration Office (JR&IO): JR&IO led the analysis and provided Human Resource functional expertise in creating, updating, validating and loading PeopleSoft HRMS core and foundation tables. JR&IO also provided technical expertise and advice on personnel functional requirements and issue identification for the DIMHRS Issue Resolution database.
- ◆ Joint Program Management Office (JPMO): JPMO supported the analysis and provided technical expertise and advice on PeopleSoft software and database installation, baseline

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transfer and cleanup, security, database maintenance, configuration management and legacy data conversion.

- ◆ Defense Finance and Accounting Service (DFAS): DFAS led scenario construction for the analysis and provided payroll functional expertise in developing payroll triggers, formulas and arrays as well as updating, validating and loading PeopleSoft core and foundation tables. DFAS also provided technical expertise and advice on pay, compensation, and system requirements needed to create change or process military pay entitlements, allowances, deductions, eligibility and computation rules.

2.1.1 Global Analysis Team

Table 2-1-1 contains a list of all members of the Global Analysis Team.

Table 2-1-1. Global Analysis Team

JR&IO and Service Representatives	DFAS Representatives	Technical Contractor
Mike Lincecum	Thomas K Johnson	Fred Clem
Marty Mitchell	Frank Murgel	Garon Reeves
Tom Rehm	Terry Bachur	
Joyce Grigsby (DFAS)	Rebecca Balderston	PeopleSoft Consulting
Mike Klosek (USMC)	Elizabeth Dieppa-Wells	Susan Haas
Phil Vanek	Barbara Gottesburen	Kort Ploshay
Laura Ajer	Penny McGann	Manuel Fuentes
	Pete Nolte	Joann Maye
	Mark Tisi	
	Eileen Wagner	

2.2 Integrated Business Scenario Development

The pay scenarios used for the analysis provide a representative sample of business processes, business rules, Information Requirements and tables necessary to ascertain PeopleSoft capabilities to support DoD personnel and pay requirements. The scenarios were chosen to evaluate the integration of HRMS and payroll functionality as well as to address core requirements critical to the overall success of the DIMHRS program. The integrated business scenarios describe four basic Scenarios, each with five pay cycles. The following matrix describes each Scenario and the five associated cycles, as well as the objectives, specific pay calendar, personnel and payroll record data, and expected results.

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Scenario 1-1 Accession – Medical Officer	
Objectives	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes pay for partial 28-day month
Pay Calendar	February 16 – February 28, 2002
HR and Pay Information	<ol style="list-style-type: none">1. Name: John Smith2. SSN: 111-11-11113. Branch of Service: Air Force4. Service Component: Active Duty5. Pay Grade: 016. Enlistment Date: February 20, 20027. Date of Separation: February 19, 20068. Basic Pay Date: April 06, 20009. Basic Allowance for Subsistence Type: Full Officer10. Duty Assignment: Camp Allyoucanbe, California11. State of Legal Residence: California12. SGLI Election: \$100,00013. Start Basic Allowance for Housing, Type I<ol style="list-style-type: none">a. Government Quarters Assignment: Not Assignedb. Military Housing Area: CA037 (Los Angeles, CA)c. Primary Dependent: Civilian Spouse
Expected Results	<ol style="list-style-type: none">1. System starts Pay entitlements and deductions<ol style="list-style-type: none">a. Basic Payb. Officer Basic Allowance for Subsistence (BAS)c. Dependent Basic Allowance for Housing (BAH)d. Serviceman Group Life Insurance (SGLI)2. System determines Basic Pay, BAS and BAH rates based on pay rate factors3. System computes 11 days of pay for period February 20 to February 28, 2002.4. System deducts full SGLI rate for full month5. System update accumulator for Allotable Pay6. System creates gross-to-net payroll showing computations for each earning and deduction.

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Scenario 1-2 Start Variable Medical Special Pay (VSP) – Medical Officer	
Objectives	Verify system automatically starts pay entitlements based on updating HR record
Pay Calendar	March 01 – March 15, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: John Smith 2. SSN: 111-11-1111 3. HR Record Updated with Medical Qualifications for Medical VSP <ol style="list-style-type: none"> a. Medical Service Date: March 25, 1996 b. Intern Status: Yes (member is Intern) c. Effective Date: February 20, 2002
Expected Results	<ol style="list-style-type: none"> 1. System starts Pay Medical VSP 2. System determines Medical VSP rate based on pay rate factors. 3. System computes pay for March 01 to March 15 for Basic Pay, BAS, BAH and Medical VSP. 4. System computes 11 days retroactive Medical VSP for February 20 to Feb 28. 5. System deducts one-half of SGLI rate for mid-month 6. System update accumulator for Allotable Pay 7. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 1-3 Change Medical Variable Special Pay (VSP) – Medical Officer	
Objectives	Verify system automatically changes pay entitlements based on updating HR record and triggers rate change based on medical service date
Pay Calendar	March 16 – March 31, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: John Smith 2. SSN: 111-11-1111 3. HR Record Updated with new Medical Qualifications for Medical VSP <ol style="list-style-type: none"> a. Medical Service Date: March 25, 1996 b. Intern Status: No (member is not an Intern) c. Effective Date: March 19, 2002 4. Medical Service Date anniversary effective March 25, 2002 (over 6)

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Expected Results	<ol style="list-style-type: none"> 1. System changes Medical VSP rate based on change to intern status effective March 19, 2002. 2. System Medical VSP rate based on medical service date anniversary effective March 25, 2002. Pay period segmented into 2 slices based on intern status change effective date. 3. System computes pay for March 16 to March 31 for Basic Pay, BAS, BAH and Medical VSP. 4. System deducts one-half of SGLI rate for mid-month 5. System update accumulator for Allotable Pay 6. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 1-4 Longevity Change – Medical Officer	
Objectives	Verify system automatically updates Basic Pay rates based on Basic Pay Date anniversary and pay deduction based on Tax Election change
Pay Calendar	April 01 – April 15, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: John Smith 2. SSN: 111-11-1111 3. Basic Pay Date anniversary effective April 6, 2002 (over 2)
Expected Results	<ol style="list-style-type: none"> 1. System updates Basic Pay rate based on Basic Pay Date anniversary. 2. System computes pay for April 01 to April 15 for Basic Pay, BAS, BAH and Medical VSP. 3. System deducts one-half of SGLI rate for mid-month 4. System update accumulator for Allotable Pay 5. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 1-5 Normal Payroll and BAH Edits – Medical Officer	
Objectives	Verify system automatically computes normal payroll and prevents concurrent payment of Dependent BAH and Single BAH
Pay Calendar	April 16 – April 30, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: John Smith 2. SSN: 111-11-1111 3. Primary Dependent Changed <ol style="list-style-type: none"> a. Primary Dependent: Military Spouse b. Effective date: April 20, 2002 c. Government Quarters Assignment: Not Assigned d. MHA Area: CA037

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Expected Results	<ol style="list-style-type: none"> 1. System stops With Dependent BAH effective April 19, 2002. 2. System starts Single BAH start effective April 20, 2002 3. System computes pay for April 16 to April 30 for Basic Pay, BAS, BAH and Medical VSP. 4. System deducts one-half of SGLI rate for mid-month 5. System update accumulator for Allotable Pay 6. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 2-1	Accession – Enlisted Prior Service
Objectives	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes pay for partial 28-day month
Pay Calendar	February 16 – February 28, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: Thomas Jones 2. SSN: 222-22-2222 3. Branch of Service: Army 4. Service Component: Active Duty 5. Pay Grade: E3 6. Enlistment Date: February 17, 2002 7. Date of Separation: February 18, 2006 8. Basic Pay Date: March 14, 2000 9. Duty Assignment: Camp Cowboy, Texas 10. SGLI Election: \$200,000 11. Start Basic Allowance for Housing: <ol style="list-style-type: none"> a. Government Quarters Assignment: Assigned b. Military Housing Area: TX286 (Ft Hood) c. Primary Dependent: Single 12. Basic Allowance for Subsistence Type <ol style="list-style-type: none"> a. BAS Type: Separate Rations b. Essential Unit Messing Rate: Discount

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Expected Results	<ol style="list-style-type: none">1. System starts Pay entitlements and deductions<ol style="list-style-type: none">a. Basic Payb. Partial Basic Allowance for Housing (BAH)c. Basic Allowance for Subsistence – Separate Rationsd. BAS Essential Unit Messing (EUM)e. Serviceman Group Life Insurance (SGLI)f. Armed Forces Retirement Home (AFRH)g. Federal and State Taxes2. System determines Basic Pay, BAS and BAH rates based on pay rate factors3. System computes 14 days pay for period February 17 to February 28, 2002.4. System deducts full SGLI rate for month5. System deducts full AFRH rate for month6. System deducts BAS UEM based at discount rate for 12 days7. System update accumulator for Allotable Pay8. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 2-2	Start Diving Duty Pay (Retroactive) and Longevity Increase
Objectives	Verify system automatically starts pay entitlements based on updating HR record
Pay Calendar	March 01 – March 15, 2002
HR and Pay Information	<ol style="list-style-type: none">1. Name: Thomas Jones2. SSN: 222-22-22223. HR Record Updated with Diving Duty Qualifications<ol style="list-style-type: none">a. Diving Duty Rating: Diver First Classb. Effective Date: February 17, 20024. Basic Pay Date anniversary effective March 14, 2002 (over 2)

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Expected Results	<ol style="list-style-type: none"> 1. System starts Diving Duty Pay 2. System determines Diving Duty Pay based on pay rate factors. 3. System updates Basic Pay rate based on Basic Pay Date anniversary. 4. System computes for March 01 to March 15 for Basic Pay, BAS, BAH and Diving Duty Pay. 5. System computes 14 days retroactive Diving Duty Pay for February 17 to Feb 28. 6. System deducts Discounted Meal Rate for mid-month 7. System deducts one-half of SGLI rate for mid-month 8. System deducts one-half AFRH rate for mid-month 9. System update accumulator for Allotable Pay 10. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 2-3 Correct Retroactive Diving Duty Pay and compute payroll	
Objectives	Verify system automatically starts and corrects pay entitlements based on updating HR record
Pay Calendar	March 16 – March 31, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: Thomas Jones 2. SSN: 222-22-2222 3. HR Record Updated with Diving Duty Qualifications <ol style="list-style-type: none"> a. Diving Duty Rating: Master Diver b. Effective Date: February 17, 2002
Expected Results	<ol style="list-style-type: none"> 1. System computes pay for March 16 to March 31 for Basic Pay, BAS, BAH and Diving Duty Pay. 2. System computes 29 days retroactive Diving Duty Pay for February 17 to Mar 15 3. System deducts one-half of SGLI rate for end-of-month 4. System deducts one-half AFRH rate for end-of-month 5. System deducts Discounted Meal Rate for end-of-month 6. System update accumulator for Allotable Pay 7. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 2-4 Change BAH	
Objectives	Verify system automatically starts pay entitlements based on updating HR record
Pay Calendar	April 01 – April 15, 2002

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HR and Pay Information	<ol style="list-style-type: none"> 1. Name: Thomas Jones 2. SSN: 222-22-2222 3. HR Record Updated Government Quarters Assignment <ol style="list-style-type: none"> a. Government Quarters Assignment: Not Assigned b. Effective Date: April 3, 2002 c. Military Housing Area: TX286 (Ft Hood, TX)
Expected Results	<ol style="list-style-type: none"> 1. System starts Single Basic Allowance for Housing, Type I and determines pay rates based on pay rate factors 2. System stops Partial Basic Allowance for Housing 3. System computes pay for April 01 to April 15 for Basic Pay, BAH, BAS and Diving Duty Pay. 4. System deducts one-half of SGLI rate for mid-month 5. System deducts one-half of AFRH rate for mid-month 6. System deducts Discounted Meal Rate for mid-month 7. System update accumulator for Allotable Pay 8. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 2-5 Retroactive BAS update and Normal Payroll	
Objectives	Verify system automatically computes normal payroll and pay retroactive BAS
Pay Calendar	April 16 – April 30, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: Thomas Jones 2. SSN: 222-22-2222 3. Basic Allowance for Subsistence Update: <ol style="list-style-type: none"> a. Retroactively Stop Essential Unit Messing Rate b. Effective Date: April 2, 2002
Expected Results	<ol style="list-style-type: none"> 1. System computes pay for April 16 to April 30 for Basic Pay, BAS, BAH and Diving Duty Pay. 2. System refunds BAS collection for April 2 to April 15 3. System deducts one-half of SGLI rate for end-of-month 4. System deducts one-half of AFRH rate for end-of-month 5. System update accumulator for Allotable Pay 6. System creates gross-to-net payroll showing computations for each earning and deduction.

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Scenario 3-1 Accession – Enlisted Non-Prior Service	
Objectives	Verify system automatically starts pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes pay for partial 28-day month
Pay Calendar	February 16 – February 28, 2002
HR and Pay Information	<ol style="list-style-type: none">1. Name: Michael Simpson2. SSN: 333-33-33333. Branch of Service: Navy4. Service Component: Active Duty5. Pay Grade: E36. Enlistment Date: February 28, 20027. Date of Separation: February 27, 20048. Basic Pay Date: February 28, 20029. Duty Assignment: DFAS Cleveland, Ohio10. SGLI Election: \$200,00011. Basic Allowance for Housing:<ol style="list-style-type: none">a. Government Quarters Assignment: Not Assignedb. Military Housing Area: TX286 (Ft Hood)c. Primary Dependent: Civilian Spoused. MHA Type: OH22912. Basic Allowance for Subsistence<ol style="list-style-type: none">a. Essential Unit Messing Rate: Yes

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Expected Results	<ol style="list-style-type: none"> System starts Pay entitlements and deductions <ol style="list-style-type: none"> Basic Pay Dependent Basic Allowance for Housing (BAH) Basic Allowance for Subsistence – Separate Rations Serviceman Group Life Insurance (SGLI) Armed Forces Retirement Home (AFRH) System determines Basic Pay, BAS and BAH rates based on pay rate factors System computes 14 days pay for period February 17 to February 28, 2002. System deducts 11 days of Essential Unit Messing (EUM) Rate System deducts full SGLI rate for month System deducts full AFRH for month System update accumulator for Allotable Pay System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 3-2 Start Diving Duty Pay	
Objectives	Verify system automatically starts pay entitlements based on updating HR record
Pay Calendar	March 01 – March 15, 2002
HR and Pay Information	<ol style="list-style-type: none"> Name: Michael Simpson SSN: 333-33-3333 HR Record Updated with Diving Duty Qualifications <ol style="list-style-type: none"> Diving Duty Rating: Diver First Class Effective Date: March 05, 2002
Expected Results	<ol style="list-style-type: none"> System starts Diving Duty Pay System determines Diving Duty Pay based on pay rate factors. System computes pay for March 01 to March 15 for Basic Pay, BAS and BAH System computes Diving Duty Pay for March 5 to March 15. System deducts one-half of SGLI rate for mid-month System deducts one-half of AFRH rate for mid-month System deducts Essential Unit Messing (EUM) Rate for mid month System update accumulator for Allotable Pay System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 3-3 Reassigned Overseas and Start COLA and BAS	
Objectives	Verify system automatically starts pay entitlements based on updating HR record

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Pay Calendar	March 16 – March 31, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: Michael Simpson 2. SSN: 333-33-3333 3. Overseas PCS Arrival: <ol style="list-style-type: none"> a. New Duty Station: Yokosuka Naval Air Station, Japan b. Accompanied Status: Accompanied c. Effective Date: March 23, 2002 4. Start COLA <ol style="list-style-type: none"> a. JFTR Locality Code: JA061 b. Number of Dependents in Overseas Area: 4 c. Effective Date: March 23, 2002 5. Start Basic Allowance for Subsistence <ol style="list-style-type: none"> a. Type: Separate Rations b. Essential Unit Messing Rate: Not Applicable c. Effective Date: March 23, 2002 6. Start Overseas Housing Allowance <ol style="list-style-type: none"> a. Government Quarters: Not Assigned b. Number of Dependents: 4 c. JFTR Locality Code: JA061
Expected Results	<ol style="list-style-type: none"> 1. System starts Dependent Rate Overseas COLA, Dependent Rate Overseas Housing Allowance and Enlisted BAS and determines pay rate based on pay rate factors 2. System computes pay for March 16 to March 31 for Basic Pay, -OHA, BAS, Diving Duty Pay and Overseas COLA. 3. System deducts one-half of SGLI rate for end-of-month 4. System deducts one-half of AFRH rate for end-of-month 5. System deducts -Essential Unit Messing (EUM) Rate for March 16 to March 22. 6. System update accumulator for Allotable Pay 7. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 3-4	Promotion
Objectives	Verify system automatically updates pay entitlements based on updating HR record
Pay Calendar	April 01 – April 15, 2002

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HR and Pay Information	<ol style="list-style-type: none">1. Name: Michael Simpson2. SSN: 333-33-33333. Promotion:<ol style="list-style-type: none">a. New Pay Grade: E4b. Effective Date: April 05, 2002
Expected Results	<ol style="list-style-type: none">1. System updates Basic Pay, –OHA, and Overseas COLA based on promotion and determines pay rate based on pay rate factors2. System computes pay for April 01 to April 15 for Basic Pay, -OHA, BAS, Diving Duty Pay and Overseas COLA.3. System deducts one-half of SGLI rate for mid-month4. System deducts one-half of AFRH rate for mid-month5. System update accumulator for Allotable Pay6. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 3-5 SRB Payment and Normal Payroll	
Objectives	Verify system automatically computes Selective Reenlistment Bonus and payroll
Pay Calendar	April 16 – April 30, 2002
HR and Pay Information	<ol style="list-style-type: none">1. Name: Michael Simpson2. SSN: 333-33-33333. HR System Updated with Reenlistment:<ol style="list-style-type: none">a. Effective Date: April 30, 2002b. New Date of Separation: April 29, 2006c. Years Reenlistment: 4d. SRB Multiplier: 3e. Payment: 50% initial payment and remaining in equal annual installment payments

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Expected Results	<ol style="list-style-type: none"> 1. System computes total gross SRB authorization 2. System computes 50% initial payment and creates future for remaining annual installment payments. 3. System computes pay for April 16 to April 30 for Basic Pay, -OHA, BAS, Diving Duty Pay and Overseas COLA. 4. System deducts one-half of SGLI rate for end-of-month 5. System deducts one-half of SGLI rate for end-of-month 6. System update accumulator for Allotable Pay 7. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 4-1 Accession – Inactive Reserve	
Objectives	Verify system setups pay entitlements and deductions on accession, determines pay rates based on pay rate tables, and computes Inactive Duty Training
Pay Calendar	February 16 – February 28, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: George Baker 2. SSN: 444-44-4444 3. Branch of Service: Marine Corps 4. Service Component: Selected Reserves 5. Pay Grade: E4 6. Enlistment Date: February 17, 2002 7. Date of Separation: February 16, 2006 8. Basic Pay Date: April 19, 1995 9. Subject to positive Time and Attendance Reporting 10. Duty Assignment: Los Angeles, CA 11. SGLI Election: \$200,000 12. Check Disposition: Space Age FCU, checking, account number 444444 13. BAH Information <ol style="list-style-type: none"> a. Government Quarters Assignment: Not Assigned b. Primary Dependent: Civilian Spouse c. Military Housing Area: CA037 (Los Angeles, CA) 14. BAS Information <ol style="list-style-type: none"> a. Basic Allowance for Subsistence Type: Separate Rations b. Essential Unit Messing Rate: Not Applicable

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Expected Results	<ol style="list-style-type: none"> 1. System starts Pay entitlements and deductions <ol style="list-style-type: none"> a. Serviceman Group Life Insurance (SGLI) 2. Inactive Reserve members do not rate pay unless duty is completed. The only pay item initiated on accession is SGLI. 3. System suspends payments and deductions since T&A reporting required
Scenario 4-2 Combined with 4-1 for execution	
Objectives	Verify system pays members for Inactive Duty Training (IDT)
Pay Calendar	February 15 – February 28, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: George Baker 2. SSN: 444-44-4444 3. T&A Reported <ol style="list-style-type: none"> a. Duty Type: Inactive Duty Training b. Period 1: February 18, 4 hours c. Period 2: February 18, 4 hours
Expected Results	<ol style="list-style-type: none"> 1. System starts Pay entitlements and deductions <ol style="list-style-type: none"> a. Basic Pay b. Serviceman Group Life Insurance (SGLI) c. Establish Federal Income Tax Wage Accumulator 2. System determines Basic Pay rate based on pay rate factors 3. System computes 2 days pay for two IDT periods on February 18, 2002. 4. System deducts full SGLI rate for full month 5. System adds basic pay to Federal Income Tax Wage Accumulator 6. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 4-3	
Report Active Duty less than 30 Days– Inactive Reserve	
Objectives	Verify system pays members for Active Duty Periods less than 30 days
Pay Calendar	March 1 – March 15, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: George Baker 2. SSN: 444-44-4444 3. T&A Reported <ol style="list-style-type: none"> a. Duty Type: Active Duty less than 30 days b. Period: February 27, 2002 to March 10, 2002

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Expected Results	<ol style="list-style-type: none"> 1. System starts Pay entitlements and deductions <ol style="list-style-type: none"> a. Basic Pay b. Basic Allowance for Housing, Type II c. Serviceman Group Life Insurance (SGLI) d. Enlisted Basic Allowance for Subsistence (BAS) e. Meal deductions for Essential Unit Messing 2. System determines Basic Pay and BAH rates based on pay rate factors 3. System computes 12 days pay for period on February 27 to March 10, 2002. 4. System computes 12 days deduction for essential unit messing 5. System deducts full SGLI rate for full month 6. System adds basic pay to Federal Income Tax Wage Accumulator 7. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 4-4	Report Active Duty more than 30 Days– Active Reserve
Objectives	Verify system pays members for Active Duty Periods more than 30 days
Pay Calendar	March 16 – March 31, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: George Baker 2. SSN: 444-44-4444 3. Member called to Extended Active Duty More than 20 Weeks: March 25, 2002 4. Member is not subject to T&A Reporting
Expected Results	<ol style="list-style-type: none"> 1. System starts Pay entitlements and deductions <ol style="list-style-type: none"> a. Basic Pay b. Basic Allowance for Housing, Type I c. Basic Allowance for Subsistence (Separate Rations) d. Serviceman Group Life Insurance (SGLI) 2. System determines Basic Pay, BAH and BAS rates based on pay rate factors 3. System computes 6 days pay for period on March 25 to March 31, 2002. 4. System does not deduct SGLI since full month collected for prior active duty period 5. System update accumulator for Federal Income Tax Wages, 6. System creates gross-to-net payroll showing computations for each earning and deduction.

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Scenario 4-5	
Report Member to Hostile File Area– Active Reserve	
Objectives	Verify system pays members for Active Duty Periods more than 30 days in Hostile Fire Area
Pay Calendar	April 01 – April 15, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: George Baker 2. SSN: 444-44-4444 3. Member reports to new Duty Station <ol style="list-style-type: none"> a. Duty Station: Afghanistan b. Effective Date: March 29, 2002 4. Start Hostile File Pay <ol style="list-style-type: none"> a. Effective Date: March 29, 2002 b. Duty Country: Afghanistan c. Combat Zone Tax Exclusion Code: Yes 5. Establish Non-Taxable Earned Income Accumulator
Expected Results	<ol style="list-style-type: none"> 1. System starts Hostile File Pay 2. System determines Basic Pay, BAH, BAS and Hostile Fire Pay rates based on pay rate factors 3. System computes 15 days pay for period on April 1 to April 15, 2002. 4. System computes retroactive Hostile Fire Pay for March 29 to March 31, 2002 (credit full monthly rate for March) 5. System deducts one-half SGLI rate for end-of-month 6. System updates Non-Taxable Earned Income Accumulator for Combat Zone Tax Exclusion March and April wages 7. System creates gross-to-net payroll showing computations for each earning and deduction.
Scenario 4-6	
Report Member Departure from Hostile File Area– Active Reserve	
Objectives	Verify system separates members and changes status
Pay Calendar	April 15 – April 30, 2002
HR and Pay Information	<ol style="list-style-type: none"> 1. Name: George Baker 2. SSN: 444-44-4444 3. Member separated from active duty <ol style="list-style-type: none"> a. Duty Station: Los Angeles, CA b. Effective Date: April 29, 2002 c. New Status: Inactive Reserve (effective April 30, 2002) 4. Member subject to T&A Reporting

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Expected Results	<ol style="list-style-type: none">1. System suspends all payments effective April 29, 20022. System determines Basic Pay, BAH, BAS and Hostile Fire Pay rates based on pay rate factors.3. System computes 14 days pay for period on April 15 to April 29, 2002. Hostile Fire Pay is credited for the full pay period.4. System deducts one-half SGLI rate for end-of-month5. System updates Non-Taxable Earned Income Accumulator for Combat Zone Tax Exclusion.6. System creates gross-to-net payroll showing computations for each earning and deduction.7. System stops Hostile Fire Pay and Combat Zone Tax Exclusion Status effective April 29, 2002 Hostile Fire Pay and Combat Zone Tax Exclusion are not prorated.
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2.3 Global Set-ups and Performance

The following is a description by pay type of the PeopleSoft Global Payroll required table set-ups and how table set-ups performed during the course of the analysis. The summaries are described as set-up and performance. The performance summaries document the result of the set-up when the scenarios were executed and raise issues generated during the course of the analysis. See Appendix D for detailed technical descriptions and processing diagrams of each entitlement and deduction.

2.3.1 Basic Pay

Set-up - Basic Pay was separated into three separate earnings elements, including Basic Pay Inactive Duty Training; Basic Pay less than 30 days, and Basic Pay greater than 30 days. Each has unique computation and eligibility factors as described in Section 2.4.1. IDT Basic Pay and Basic Pay less than 30 days were generated by using the Global positive input facility to report drill or tour performance. Basic Pay greater than 30 days for the Active Duty member was generated from the PeopleSoft HRMS Hire (Accession) action. For the Reserve/Guard member going on an Active Duty Long Tour, an effective-dated HR assignment action was processed to member Job Data with an action/reason of Data Change/Status Change. The team added 2002 Basic Pay rates to the delivered PeopleSoft HRMS Salary Grade Table for use in computation.

Performance – After numerous setup changes and payroll runs (similar to that of a programmer's unit testing), Global results matched Basic Pay expected results.

Computed amounts in the “Results by Calendar” (Global equivalent of a payroll register) did not include the actual dates of segmentation periods, only the start date and stop date of the pay period into which the segment fell. That was true for both semi-monthly and weekly pay periods, and all entitlements and deduction paid. The Global positive input facility used for Inactive Duty Training days and Short Tour Start and Stop days requires input of start and stop

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dates, but the information is not carried over to the Calendars. There are some supporting “views” such as “Supporting Elements” where the segment dates were noted but the views were not consistent. This issue needs additional analysis to identify when and where the segments are recorded or not recorded.

Suppression of pays and allowances not authorized during Inactive Duty Training days was handled by a the filtering factor tied to Reserve Eligibility group, in which unauthorized earnings amounts were set to zero (all except Basic Pay). A subsequent scenario involving a Reservist paid for an Active Duty short tour, when other pays and allowances are authorized, required setting up an authorizing factor tied Reserve Business Unit (because Reserve Eligibility Group had already been taken for another purpose. Both methods provided the correct results, but more analysis is required to identify and incorporate into processing a member-level factor or factors that will address both situations and not require review and potential modification when circumstances change.

Although the limitation of two drills per day was not within the scope, PeopleSoft developed a formula (TST IDT DRILL) to attempt to limit drills per day. It was tested in, Scenario 4, Cycle 6. The formula apparently did not work, in that Global allowed the processing of 3 drill periods for one day. In a related circumstance, an Inactive Duty Training Period and a short tour Active Duty Day were input on the same day. The military rule does not allow the two on the same day. As evidenced by the results for Scenario 4, Cycle 6, the system allowed payment of two types of duty for one day. A potential solution is a status factor denoting the reserve member’s drill category tied to drill or tour dates. The main point however is that these situations require further analysis as they represent an important part of the edits and validations required in a DIMHRS personnel/pay environment.

Longevity. The delivered Global functionality does not post an effective dated row to Job Data for longevity increases. This represents a concern raised during the Initial Analysis of PeopleSoft HRMS and Payroll for North America. For this analysis, PeopleSoft Consulting (PSC) developed a workaround using other Global components by defining an “Date Event” equal to Service Date + 2yrs, +4yrs, +6yrs, etc. When the derived “anniversary date” falls within the pay period, it segments the pay period into two slices, one before the anniversary date and one beginning with the anniversary date. Then the derived daily rate is applied to payable days to arrive at slice amounts. After the first payroll run, the Team had to de-bug the new set-up to pull 2002 monthly rates rather than 2001. The payroll was subsequently rerun and results were correct. The consensus was that above work-around is probably not the real world solution, but discussion also identified differing preferences for how to execute the longevity increase in the live environment; either with effective dated rows on Job Data or a dynamically derived process. Discussion also tentatively identified a potential SQR-based procedure which would post to Job Data and provide the needed audit trail. That and other potential solutions require additional analysis.

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2.3.2 Basic Allowance for Subsistence (BAS)

Set-up - Two earnings elements were set-up separately for enlisted and officers. The trigger to pay BAS was the entitlement to Basic Pay (except Inactive Duty Training). The rate was based on the member's grade category, officer or enlisted.

Performance - The expected results and Global Payroll results for BAS did not always agree, depending on the method of calculation (see Scenario 1, Cycle 1 or Scenario 4, Cycle 5). In some cases it was a rounding issue on an odd-numbered monthly rate paid between the 2 semi-monthly pay periods. In another case, however, additional research showed the issue to be an incorrect initialized monthly rate of \$261.50 (versus \$261.60). The latter situation accounted for a recurring \$.05 difference per semimonthly pay period. The earnings element set-up was corrected to reflect \$261.60 and the error went away. Global delivers various rounding options with Earnings element and other set-ups. The issue will have to be explored further to determine the most effective method, not only for BAS but for all entitlements and deductions, according to their specific requirements.

2.3.3 Basic Allowance for Housing (BAH)

Set-up - BAH was broken down into three separate earnings elements, With-Dependents, Single, or Partial, based on eligibility criteria unique to each. Eligibility was triggered from the HRMS hire action and the type of Basic Pay earnings in effect for the member (Basic Pay over 30 days and Basic Pay less than 30 days). A selection of BAH rates was set up in a PeopleSoft-delivered Locality Tax table, reconfigured to hold BAH factors by location. The computation process accessed correct rates by member based on address, dependent and quarters information stored in the HRMS Personal Data tables.

Performance - Global results generally match expected results with the following concerns/exceptions:

To eliminate the payment of Basic Allowance for Housing and Overseas Housing Allowance (OHA) jointly, the first line of the BAH formula set the OHA earnings to zero. Although this worked for the scenario execution, this might be not the ideal real-life solution. Further research will be required to include the order in which entitlements are processed when the payment of one precludes the payment of another. There are several such situations in the military pay arena.

The PeopleSoft HRMS Personal Data Home Address field was used to determine if the member received partial, single or with dependent rate BAH, based a value in the field of "family," "barracks" or "Non-Government." In one instance, the field was accidentally left blank and the member received single rate of BAH. The problem was traced to a formula set-up (FOR BAH RATE), which provided only for the "Barracks" and "Family" values. The formula default absent a value returned the correct single rate.

2.3.4 Medical Variable Special Pay (VSP)

Set-up - A single earnings element was established for Medical VSP. Initially, the intent was to trigger eligibility directly from the PeopleSoft HRMS Competency Management table based on Proficiency Level of Intern or Non-Intern and a report of a Medical Service Date stored in the PeopleSoft HRMS Professional Experience data field. However, as described earlier, the competency trigger did not work. The team elected to use PeopleSoft HRMS Job Data, with an Action/Reason of Data Change/Medical Competency. The Team reconfigured another instance of the delivered PeopleSoft HRMS Salary Grade Table to hold a selection of Medical VSP Rates linked to Medical Years Service and Intern versus a Non-Intern Status.

Performance – Global results generally matched Expected results. During Cycle 2, it was discovered that the original methodology to trigger the start of Medical Variable Special Pay by a report of an employee competency did not work. As described elsewhere in this report PeopleSoft Consulting identified a deficiency within the triggering and competency table that prohibited the establishment of a trigger from the effective dated competency table. The alternate solution was inserting an effective dated Job Data change “pointing” back to the Medical Competency. This set-up worked. Global’s triggering functionality has been identified as a gap and must be more fully explored in subsequent analysis. Special Cycle 6 included an expanded Medical Officer scenario that involved a retroactive hire. Although Global results matched expected results, the level of detail available on the retroactive adjustments may be inadequate for accounting purposes.

2.3.5 Hostile Fire Pay (HFP)

Set-up - A single earnings element was established for HFP. Eligibility was triggered by inserting an effective-dated row in member Job Data assigning him/her to an HFP-eligible location. The PeopleSoft HRMS Location Table.Address 3 line contained the indicator to identify HFP/CZTE-eligible locations. The link then with member location on Job Data established entitlement. The HFP rate of \$150 per month was established at the earnings element level. The Team also developed a Global formula to determine whether to pay \$75 or the full \$150 based on a month-to-date accumulator for HFP and whether it was the first or second pay period for the month. .

Performance - The expected results and the Global results generally matched. Based on the semi-monthly pay calendar, half was paid one period and the other half the second period. The formula used included an accumulator the flat rate and pay period begin/end dates to determine the amount to be paid within the pay period. As previously noted, the trigger was based on Address 3 of the Location table (not on the actual “location” code), together with member location on Job Data. This worked within the scope of the Global Payroll scenarios. Further research will have to be done to accommodate a separation within the month.

2.3.6 Diving Duty Pay

Set-up - A single earnings element was established for Diving Duty. As with Medical VSP, the intent was to use a personnel transaction, (PeopleSoft Competency) to trigger eligibility. The alternate solution was to use Job Data, in this case reporting a Diving Competency as part of anAction/Reason code. The Team reconfigured another instance of the delivered PeopleSoft HRMSPeopleSoft HRMS Salary Grade Table to hold a selection of Diving Duty Rates based on Rating and Service Component.

Performance - The expected results and the Global results generally matched. As with Medical VSP above, it was discovered that the original methodology to trigger the start of Diving Duty Pay directly from PeopleSoft Competency Management did not work as it was set-up. The similar alternate solution as Medical VSPwas applied here.

Special Cycle 6 included an expanded Diving Duty scenario that involved multiple personnel eligibility criterias. Again Global results matched Expected results, but the set-up included a pro-ration formula unique to the expanded scenario but unlike the standard pro-ration formula based on the 30-day month. The new pro-ration formula, called the “rolling calendars rule” was necessitated by the “rolling” requirement that the member successfully complete 2 dives per month for the 2 month immediately preceding the current. The Team noted that the specially developed 30-day formula worked within the scope of scenarios and Cycles 1-5. The “rolling aspect” of Scenario 2, Cycle 6needed to be further researched to determine the similar complex entitlementswill also require unique pro-ration changes.

2.3.7 Overseas Housing Allowance (OHA)

Set-up - A single earnings element was established for OHA. The trigger to pay OHA was processing an effective dated row on PeopleSoft HRMS Job Data to report a Permanent Change of Station PeopleSoft HRMSTransfer). Eligibility and computation factors such as member’s pay grade, years of service, JFTR location, utility and maintenance information and rent/sharer information were stored in PeopleSoft HRMS Job Data, Location-related tables, Business Expense table, and Credit Card table.

Performance - As noted a in the BAH write-up, the method to eliminate the dual payment of Basic Allowance for Housing and OHA worked for the scope of the submitted scenarios, but will have to be reviewed forapplicability in every case. One scenario cycle did not successfully segment OHA based on a promotion event. The problem was traced to the Promotion Segmentation Event Definition which was missing the OHA link. It should be noted that PeopleSoft Consulting developed a formula to consider Utility Point scores in the OHA computation. However, this portion of the computation process was not within the scope of Scenario 3, thus was not validated.

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2.3.8 Selective Reenlistment Bonus (SRB)

Set-up - SRB set up a single earnings element. The trigger to pay the bonus was based on inserting an effective dated row on the member's Job Data. The total amount due the member is based on the length of additional obligated service (part of the contract data information), zone multiplier (Shift Factor field) and the member's basic pay amount. The initial payment amount and recurring payments amounts were calculated as part of a Global formula. The annual payments were placed in an Annualized Earnings accumulator for validation.

Performance - The total amount of bonus, initial installment and anniversary payments computed by Global Payroll matched the expected results. The initial payment was made to the member (Scenario 3, Cycle 5). However, the ability to demonstrate whether Global Payroll could actually execute annual installments was not within the scope of the analysis.

2.3.9 Cost of Living Allowance (Overseas) (OCOLA)

Set-up - The Team set up a single earnings element for OCOLA. As with OHA above, the trigger to pay COLA was an effective dated row in Job Data for a Permanent Change of Station. The rate was based on the member's pay grade, years of service, JFTR location (Floor Number on the Location table) and number of authorized dependents (PeopleSoft HRMS Dependent/Beneficiary data "SAME ADDRESS AS EMPLOYEE").

Performance - Global computed amounts generally agreed to Expected Results. The automated trigger to pay OCOLA was an effective dated Job Data row for Permanent Change of Station (PeopleSoft HRMS Transfer) to the Japan overseas location. The OCOLA rate was computed by deriving the COLA Annual Compensation Rate and Average Spendable Income from specially configured tables, and then applying in a formula the JFTR Locality Index to arrive at the actual amount due. One problem was noted where the Global bracket (BR COLA SI), set up to resolve ambiguous or missing values (in this case the member's grade) by referring to a higher rather than lower table value. This bracket yielded an incorrect rate. The problem appears to be correctable by changing the resolution method in the formula but requires additional analysis.

As noted in the Trigger gap discussion, OCOLA, BAH and OHA triggers were initially intended to be triggered from the PeopleSoft HRMS Location Table. This trigger approach did not work. The alternate solution in all cases was inserting the effective dated row on Job Data. This solution requires manual processing.

2.3.10 Armed Forces Retirement Home

Set-up - The Team set up a single deduction element for AFRH. This deduction was triggered based on the member's business unit (Service Component) and pay grade (active enlisted only for purposes of scenarios). Based on the business unit there was no collection for the reserve member. It was also determined that half (\$.25) would be collected in the first pay period and half in the second pay period unless it was a prorated month in which all would be collected in

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the applicable pay period. The rate collected was based on the flat rate entered on the deduction element set-up.

Performance – The Global results and Expected results were the same.

2.3.11 Servicemember's Group Life Insurance (SGLI)

Set-up - The Team set up a single deduction element for SGLI. The deduction was triggered based on the PeopleSoft HRMS Hire action. It was decided that half the monthly deduction amount would be collected each pay period for active duty members, unless it's a prorated month and then all would be collected. For a reserve member, the total deduction amount would be collected on the first pay period of the month (even during an active duty tour over 30 days.). If a reserve member had no pay during a month, the SGLI Premium was to be placed in arrears and collected in a subsequent month with pay.

A formula was developed to look at a member's business unit to determine which method to use. The formula also included looking at a SGLI month-to-date accumulator and pay period dates to recognize the situation where the active duty member was not present for both pay periods during the month and thus the full month deduction needed to be taken. Member level eligibility and computation data elements were stored in PeopleSoftBenefit related tables for dependents and coverage amounts. The delivered PeopleSoft AD/D (Accidental Death/Dismemberment) table, configured from Initial Analysis contained available coverage amounts to which the \$.08 basic premium rate was applied.

Performance - As noted, there was one set up for Reserves and one set for Active Duty. In both cases, the Global results and the Expected results matched. It should be noted that only two premium amount were used (\$100,000 and \$200,000) given time constraints and the Global Analysis Charter agreements. That did not preclude the application from selecting an "incorrect" coverage amount as it had to access the right one (between the 2) based on the member-level coverage election.

2.3.12 BAS Discounted Meal Rate Deduction

Set-up –The Teamup a single deduction element for Discounted Meals. The deduction was triggered by inserting an effective dated row to the member's Job Data, indicating assignment or leaving EUM status. The status was store as a Yes/No indicator in the PeopleSoft HRMS Personal Data, full-time Student Flag. A Global formula was developed to determine the number of days to apply the reduced or full rate, based on the relationship between changes to the EUM indicator and pay period begin and end dates.

Performance - Global results matched Expected results after analysis and resolving identified problems. The deduction was triggered by an effective dated Personnel action to PeopleSoft HRMSJob Data assigning the member to EUM status. In conjunction with the personnel action, the value in the Full-time Student field had to be set to Yes (or No if the member was terminating EUM status). Initial results identified a deficiency with the duration established to derive "deductible" days, and where to apply the reduced (25%) versus the full (75%) rate. Once

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corrected, Global duration and formulas computed correctly. A retroactive scenario required similar research and resolution relative to refunding a portion of a deduction for the last day of EUM status. That last day had previously been deducted at the full rate; the formula had to refund 75% of that full rate. Reconfiguration of the process did result in the correct values being computed in the final deduction month.

2.3.13 Combat Zone Tax Exclusion (CZTE) Accumulator

Set-up – The Team established a single accumulator for CZTE. According to the Global basic template for establishing accumulators, the set-up identified and linked the entitlements that the accumulator needs to capture as non-taxable when the member is in a designated Combat Zone. Given the separate Earnings elements identified above that included Basic Pay greater than 30 Days; Basic Pay less than 30 Days; Hostile Fire Pay; Medical Variable Special Pay; and Diving Duty Pay. None of the allowances are taxable and therefore were not included. It should be noted that if reenlistment is executed in a Combat Zone, the Selective Re-enlistment Bonus would be tax-exempt; however, because the scenario for this analysis did not have the member reenlisting in a Combat Zone, the SRB earnings element was not linked to the CZTE accumulator. The CZTE trigger was based on inserting an effective dated assignment change on member PSHR Job Data, assigning the member to a CZTE/HFP eligible location. As described in the HFP set-up above, the PeopleSoft HRMS Location Table identified such eligible locations. The link with the member-level location triggered the status change successfully.

Performance - Global results for the trigger matched Expected results. The member's record showed him assigned to the eligible location (Afghanistan). A computation difference in the first applicable scenario was traced to the CZTE Accumulator set-up. The date key needed to capture the correct amount of non-taxable entitlement had to change from *beginning with the effective date of assignment to Combat Zone* to *month-to-date entitlement totals for the entire month that includes the assignment begin date*.

2.4 Lessons Learned

The following issues came to light during the set-up phase are presented as lessons learned for the next phase of analysis:

2.4.1 Up-Front Design Phase

The up-front analysis process to design Global set- is critical. As much as possible before getting into the actual set-up detail, the analysis must take into account all aspects of a particular process to be tested such as longevity increases or pay type. If the process is scenario specific, the initial set-ups will most likely not work properly in subsequent more complex scenarios. In the latter instances, formulas, variables, brackets, arrays and the like will have to be diagnosed for flaws and modified. This becomes a time-consuming maintenance issue and calls into question the simpler set-ups that initially produced acceptable results. For example, in our analysis, the initial set-ups to derive dependent status and number of member dependents for OHA, OCOLA

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and BAH worked for the first test cycle. But as later cycles became more complex those initial set-ups did not consistently return expected results and had to be modified. That extra effort was useful to get an exposure to the Global trouble-shooting process, and demonstrated the product's considerable power and flexibility to revamp quickly problematic configurations, but more comprehensively thought out solutions up front will save considerable time and frustration later on.

2.4.2 Gross-to-Net Revalidation of All Cycles

Even the best thought out design required some modification initially. Whatever the extent of modification ultimately required, however, running a final gross-to-net validation is recommended. The objective during Global Analysis was to verify that the modified, more complex set-ups still addressed the earlier simpler situations. Therefore, time for such a validation exercise should be built into the analysis schedule.

2.4.3 Incorporating Business Rules with Scenario Packages

Scenario scripts provided to PeopleSoft Consulting before the analysis did not include the detailed business rules underlying the scenario processes and pay types to be tested. This created some misunderstanding at the detailed set-up level about what each set-up needed to accomplish the agreed upon test objective. The additional discussion was time consuming, and often resulted in the perception that the scope of the analysis was expanding. For future analysis, the Team recommend submitting the business rules along with the scenario scripts. That will provide a fuller understanding, of what needs to be understood and addressed at the detailed set-up level. The business rules are primarily personnel business rules and this illustrates the difficulties of dealing with pay in isolation from human resources.

2.4.4 Integration with Human Resources

The benefits Global has to offer are heavily dependent on HR processes and set-ups. While this analysis was pay-centric, and HR set-upswere derived from earlier analysis, set-up decisions for pay and personnel must beintegrated to ensure the objectives of both the Personnel and Pay communities are being addressed. This is particularly true when considering which HR areas (e.g., Position Data, Manage Competencies, Job Data, Personal Data, etc.) are to be used as triggers for pay authorization and computation.

2.4.5 Team Continuity

The learning for Global, as well as that of consultants new to military pay, is steep. It is critical that some or all of the DoD and PeopleSoft Consulting staff that have participated in analysis efforts to date be carried over into subsequent phases. The common and complimentary understandings and knowledge gained from previous efforts will benefit people new to the

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process and save time. This further illustrates the need to ensure integration of human resources and pay to every stage of design and development.

2.5 Foundation Table Set-up

The Global Analysis Team reviewed all core and foundation tables used to regulate PeopleSoft HRMS and Global Payroll applications as applicable to this plan. These tables were initially setup during the DIMHRS Initial Analysis and are being adjusted on an on-going basis during Comprehensive Analysis. The original payroll table configuration was based on the use of PeopleSoft Payroll for North America application, and selective use of Initial Analysis table configuration was used to support Global Analysis. This selection process is addressed in Appendix C, PeopleSoft Payroll Analysis Plan. At a minimum, the following table setup is required to support the pay analysis.

Department – Department of Defense

Pay Groups and Payroll Run IDs:

- ◆ Army Active Duty
- ◆ Army Reserve
- ◆ Navy Active Duty
- ◆ Marine Corp Active Duty
- ◆ Air Force Active Duty

Pay Calendars

- ◆ February 28, 2002
- ◆ March 15, 2002
- ◆ March 31, 2002
- ◆ April 15, 2002
- ◆ April 30, 2002
- ◆ May 15, 2002

2.5.1 Global Payroll Setup Tables

Pay Tables NOTE: Pay rate tables in DIMHRS will not be maintained the same way they are in the current legacy systems. The D&I will determine best solution to support this requirement. Setup to execute these scenarios will represent an “out-of-the-box” solution.

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- ◆ Basic Pay: Monthly rates based on pay grade and years of creditable years of military service
- ◆ With Dependent Basic Allowance for Housing: Monthly rates based on pay grade
- ◆ Single Basic Allowance for Housing: Monthly rates based on pay grade
- ◆ Partial Basic Allowance for Housing: Monthly rates based on pay grade
- ◆ Full Officer - Basic Allowance for Subsistence: Monthly rate
- ◆ Separate Rations - Basic Allowance for Subsistence: Monthly rate
- ◆ Medical Variable Special Pay: Monthly rate based on years creditable years of medical service and intern status
- ◆ Diving Duty Pay: Monthly rate based branch of service, officer or enlisted status and diver qualification
- ◆ Hostile Fire Pay: Monthly rate
- ◆ Overseas Cost of Living Allowance: Daily rate based on grade, number of dependents and location
- ◆ Serviceman Group Life Insurance: \$.80 for each \$10,000 of coverage
- ◆ Armed Forces Retirement Home: \$1.00 per month (enlisted only)

Earnings:

- ◆ Basic Pay
 - Daily Rate based on 30-day month (Monthly Rate/30 * Number of Days)
 - Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month, compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.
 - Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.

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- Inactive Duty Training: A member of a Reserve Component is entitled to compensation at the rate of one-thirtieth of the basic pay prescribed for grade and years of service for the performance of each authorized period of regular inactive duty training (drill or unit training assembly (UTA)). To qualify for pay for a period of inactive duty training, each member shall engage in such duty or training for the period not less than 2 hours. A member cannot qualify for pay for more than two periods of inactive duty training during a single calendar day.
- Trigger: Monthly rate changes based on pay grade changes and basic pay date anniversary dates
- For active duty 30 days or more, Basic Pay automatically starts on accession. For active duty less than 30 days or Inactive Duty Training, positive reporting is required to start Basic Pay.
- ◆ With Dependent Basic Allowance for Housing, Type I
 - Daily Rate based on 30-day month ($\text{Monthly Rate}/30 * \text{Number of Days}$)
 - Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month, compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.
 - Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.
 - Trigger: Eligibility changes based on primary dependent changes and assignment or termination of family type government quarters.
 - Trigger: Monthly rate changes based on pay grade changes and location
 - Concurrent payment of With Dependent Basic Allowance for Housing, Single Rate Basic Allowance for Housing and Partial Rate basic Allowance for Housing is not authorized.
- ◆ Single Rate Basic Allowance for Housing, Type I
 - Daily Rate based on 30-day month ($\text{Monthly Rate}/30 * \text{Number of Days}$)

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- Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month, compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.
 - Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.
 - Trigger: Eligibility changes based on primary dependent changes and assignment or termination of government quarters.
 - Trigger: Monthly rate changes based on pay grade changes and location
 - Concurrent payment of With Dependent Basic Allowance for Housing, Single Rate Basic Allowance for Housing and Partial Rate basic Allowance for Housing is not authorized.
- ◆ Partial Basic Allowance for Housing
- Daily Rate based on 30-day month (Monthly Rate/30 * Number of Days)
 - Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month, compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.
 - Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.

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- Trigger: Eligibility changes based on primary dependent changes and assignment or termination of government quarters.
- Trigger: Monthly rate changes based on pay grade changes
- Concurrent payment of With Dependent Basic Allowance for Housing, Single Rate Basic Allowance for Housing and Partial Rate basic Allowance for Housing is not authorized.
- ◆ Full Rate Officer Basic Allowance for Subsistence
 - Daily Rate based on 30-day month ($\text{Monthly Rate}/30 * \text{Number of Days}$)
 - Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month, compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.
 - Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.
 - Trigger: For active duty 30 days or more, Full Rate Basic Allowance for Subsistence automatically starts on accession. For active duty less than 30 days or Inactive Duty Training, positive reporting is required to start Basic Allowance for Subsistence.
 - Payable to officer personnel only
- ◆ Separate Rations Basic Allowance for Subsistence (SEPRATS)
 - Daily Rate based on 30-day month ($\text{Monthly Rate}/30 * \text{Number of Days}$)
 - Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month, compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.

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- Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.
- Payable to enlisted personnel only
- ◆ Medical Variable Special Pay
 - For enlisted members and warrant officers, pay is not subject to Federal and State tax if assigned to Combat Zone Tax Exclusion Area.
 - Daily Rate based on 30-day month ($\text{Monthly Rate}/30 * \text{Number of Days}$)
 - Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month, compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.
 - Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.
 - Member must be a medical officer
 - Trigger: Monthly rate changes based on intern status and medical service date anniversary date
- ◆ Diving Duty Pay
 - If enlisted member or warrant officer, pay is not subject to Federal and State tax if assigned to Combat Zone Tax Exclusion Area.
 - Daily Rate based on 30-day month ($\text{Monthly Rate}/30 * \text{Number of Days}$)
 - Service of 30 Days or More. Compute monthly compensation as if each month had 30 days. When service begins on an intermediate day of the month, pay for the actual number of days served during that calendar month, but only through the 30th day of that month. If active military service begins on the 31st day of any month,

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compensation does not accrue for that day. Any person who enters active service during February and serves until the end of the month is entitled to the pay for 1 month (30 days), less the prorated amount for the number of days expired before entry on duty. If the service ends before the last day of February, pay the member only for the actual number of days served.

- Service of Less Than 30 Days. Members of the Uniformed Services entitled to receive compensation for continuous periods of less than 1 month are entitled to pay and allowances for each day of the period at the rate of 1/30 of the monthly amount of such pay and allowances. Include the 31st day of a calendar month in the computation. Members who are obligated to serve on active duty for 30 days or more, but who were released before performing such active duty for at least 30 days, are entitled to receive pay and allowances on a day-to-day basis.
- Trigger: Eligibility changes based on diver's qualification status.

◆ Hostile Fire Pay

- For enlisted members and warrant officers, pay is not subject to Federal and State tax if assigned to Combat Zone Tax Exclusion Area
- Hostile fire pay or IDP is in addition to all other pays or allowances. It is payable in the full amount of \$150, without proration or reduction, for each month, during any part of which, a member qualifies. Active and Reserve component members who qualify, at any time during a month, will receive the full amount of HFP/IDP regardless of the period of time on active duty or the number of days they receive basic pay during that month.
- Trigger: Eligibility changes based on location (designated IDP area)
- Overseas Cost of Living Allowance
- Not Subject to Federal, State, Social Security and Medicare Tax
- Proration and payment based on actual days per month
- Trigger: Eligibility changes based on primary dependent changes and location changes.
- Trigger: Daily rate changes based on primary dependent changes, number of dependents and location changes.

◆ Selective Reenlistment Bonus (SRB)

- For enlisted members and warrant officers, bonus is not subject to Federal and State tax if assigned to Combat Zone Tax Exclusion Area
- Computation based on number of months reenlisted, obligated service, SRB multiplier and monthly Basic Pay.
- The member is due 50% of gross entitlement minus taxes on reenlistment date. The remaining amount is paid in equal annual installments.
- Member must be enlisted

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Deductions:

- ◆ Serviceman Group Life Insurance (SGLI): Not prorated based on partial months
- ◆ Permanent Change of Station Advance Pay
- ◆ Dependent Support Allotment: Not prorated based on partial months
- ◆ Savings Allotment: Not prorated based on partial months
- ◆ Armed Forces Retirement Home (AFRH): Not prorated based on partial months
- ◆ Essential Unit Messing (BAS Collection)

Accumulators

- ◆ Allotable Pay:
 - Total gross Basic Pay and Basic Allowance for Housing (With Dependent, Single or Partial)
 - Total allotments per month cannot exceed this amount
- ◆ Monthly Wages Subject to Taxes (Federal, State, Social Security and Medicare)
- ◆ Total Nontaxable Wages Earned in Combat Zone Exclusive Area

DoD Data Elements Required for Pay Triggers or Eligibility: PeopleSoft data elements will be identified for use during this analysis to simulate the existence of information. The product will apply and execute pay based upon setup arrays, brackets, other rules and formulas. Final Comprehensive Analysis results will document the actual gaps and provide detailed requirements for the DIMHRS developer/implementer to use. (Note: data element after the slash is equivalent glossary term or suggested PeopleSoft data field used in the applicable script(s)).

- ◆ Government Quarters Assignment (Assigned or Not Assigned)/ Basic Allowance for Housing Type Code
- ◆ Military Housing Area (Different codes based on location)/ Basic Allowance for Housing ZIP Code
- ◆ Basic Allowance for Subsistence Type (Full Officer and Separate Rations)/Basic Allowance for Subsistence Type Code
- ◆ Essential Unit Messing Type (Discount, Standard and Not Applicable)/ Essential Unit Messing (EUM) Code
- ◆ Basic Pay Date (creditable service date for Basic Pay)/ Basic Pay Start Date
- ◆ Medical Service Date (creditable service date for Medical Pay)/ Job Data. Professional Experience Date (Medical Service Date):

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- ◆ Primary Dependent (Civilian Spouse, Single, Military Spouse and Child in Custody of Member)/ Personal Data.Marital Status
- ◆ Duty Station (Zip Code)// Basic Allowance for Housing ZIP Code
- ◆ Duty Country/Job Data.Work Location
- ◆ Pay Grade/Pay Grade Code(s)
- ◆ Creditable Years of Military Service (based on Pay Date)/ Creditable Years of Service Quantity
- ◆ Creditable Years of Medical Service (based on Medical Service Date)/Same
- ◆ Diving Duty Rating (Combat Diver, Master Diver, Diver First Class, Diver Second Class, Diving Officer)/ Diver Rating Code
- ◆ Medical Intern Status (Yes or No)/ Internship Status Identifier
- ◆ JTFR Locality Code (see COLA Index Table for values)/ JFTR Location Code
- ◆ Accompanied Status: (Accompanied or Non-accompanied)/ Dependent Status Code
- ◆ Number of Dependents in Overseas Area/Number of Dependent Quantity
- ◆ Number of Months to Prorate PCS Advance Pay (1 through 24 months)/NA
- ◆ SRB Installment Anniversary Date (future annual installment dates)/ Selective Reenlistment Bonus Annual Payment Date(s)
- ◆ SRB multiplier/Selective Reenlistment Bonus Military Specialty Multiplier Quantity
- ◆ Enlistment Date/Job Data.Hire Date
- ◆ Date of Separation/Job Data.Action
- ◆ State of Legal Residence/Personal Data.Home Address.State
- ◆ Branch of Service (Air Force, Marine Corps, Navy and Army)/ Branch of Service Code
- ◆ Combat Zone Tax Exclusion (Yes or No)/Job Data.Action
- ◆ Service Component (Active Duty, Reserve or National Guard)/ Service Component Code
- ◆ Other:
 - Compute all daily rate computations using 5 decimal places
 - The Department of Defense Financial Management Regulation (DoDFMR), Joint Federal Travel Regulation (JFTR) and service regulations defining pay entitlements and deductions are references that support this plan.

- Copies of current military pay eligibility and computation business rules are references that support this plan. The Comprehensive Analysis has produced DIMHRS Pay eligibility rules for many pay types. These rules will be available to support this plan as applicable.

2.6 Global Analysis Issue Log

The Global Payroll Issue Management Log was used to identify, track, and resolve issues that are encountered during the course of this analysis. One of the project's critical success factors is an effective process for identifying issues specific to the Global Payroll analysis process. Issues identified for the Global Analysis Issue Log are specific to Global Analysis process only and are included at Appendix G. Policy issues or significant process gaps that might require software modification will be addressed at the program level through the DIMHRS Issue Identification and Resolution Process described in paragraph 2.7.

2.7 DIMHRS Issue Identification and Resolution Process

The primary activity of the Global Payroll Analysis Team was to identify differences between functional requirements and the functionality provided by PeopleSoft. Figure 2-1 outlines the Issue Identification and Resolution Process that the Global Payroll Analysis Team followed to document and resolve these issues. All issues that the Team generated during the Global Payroll Analysis were maintained in an Issues Database. Appendix H contains a detailed description of the DIMHRS Issue Identification and Resolution Process.

Issue Review Process

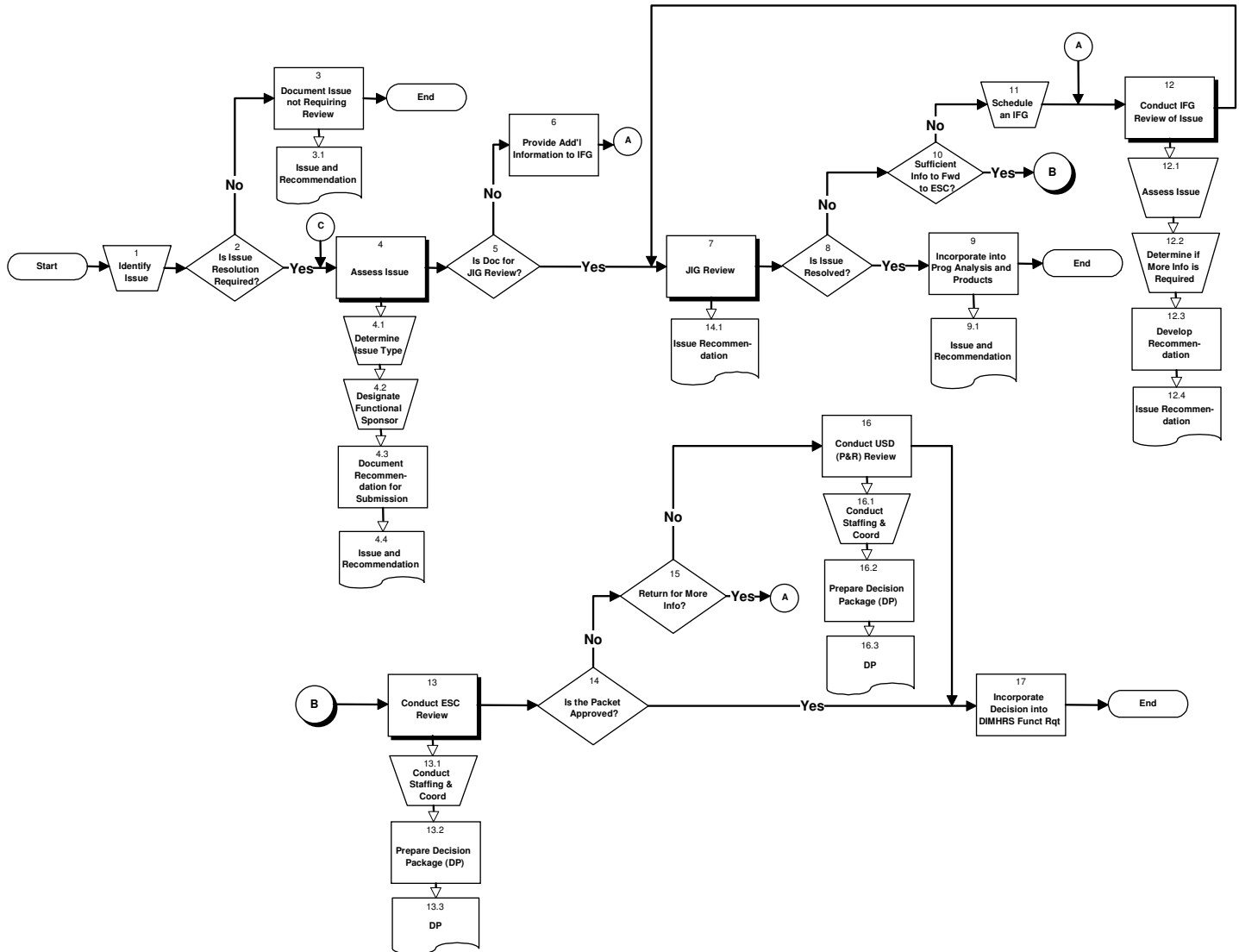


Figure 2-1. DIMHRS Issue Identification and Resolution Process

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SECTION 3

3. FINDINGS AND OUTCOMES

This section describes the Global Analysis Team's findings related to scenario execution, supportability assessment, DIMHRS issue analysis, and data assessment.

3.1 Scenario Assessment

The following provides cycle-by-cycle description of processing results. The Global Payroll analysis ran 6 payroll cycles. Within 24 distinct scenarios were executed to demonstrate the military process described below in the Scenario Synopsis and Objective. Although all had common elements (e.g., computation of Basic Pay), each scenario had a distinctive aspect such as a Permanent Change of Station, Promotion, or Assignment to a Combat Zone. Global Payroll analysis tested 24 separate military pay "situations" while continuously re-testing the common elements, all requiring at various stages in the process some degree of pro-ration, segmentation, retroactivity and automatic triggering of entitlement. A special Cycle 6 was added at the end. This was designed to test more complex scenarios requiring multiple criteria, while re-validating set-ups that had been used and modified to execute previous cycles.

Each write-up below begins with the Expected versus. Global results spreadsheet. The Global amounts are those obtained when the process ran satisfactorily according to required Expected results. At the end of each cycle, a discussion section describes problems encountered, means of resolution or, if not resolved, disposition as an outstanding issue.

With few exceptions, Global results matched Expected results, as reflected in the spreadsheets. In some cases numerous runs and modifications to set-ups were required before the process ran satisfactorily. The analysis also raised a number of concerns, including the Global Triggering, Retroactive processing-related capabilities and the Data gaps. The Team determined that Global apparently does not display in Pay Calendars the segment or slice begin and end dates where pay computation factors changed during the period. That has accounting and reporting implications. Additional research is required here to determine if the dates are in fact maintained within a history section of payroll processing results but just do not display on the Results Calendar. Scenario execution demonstrated that Global Payroll could support major aspects of military pay processing including:

- ◆ pro-rating amounts due based on the military pay-unique 30-day month (all Scenarios);
- ◆ computing variable (all Scenarios) and fixed rate entitlements (Scenario 4 Hostile Fire Pay) based on pay computation factors;
- ◆ computing installment-based entitlement (Scenario 3 Selective Reenlistment Bonus) based on pay computation factors;

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- ◆ establishing and taking deductions either on a daily rate (BAS Discounted Meal Rate in Scenarios 2 through 5) or based on a fixed rate (SGLI or AFRH in all scenarios);
- ◆ adjusting fixed-rate deduction amounts to cover either the entire fixed rate due, or part of it, based on whether the member has been present for all pay periods for the month (all scenarios);
- ◆ computing Reserve/Guard drill pay for Inactive Duty Training (IDT) , Active Duty Short Tours, and Active Duty Long Tours (Scenario 4);
- ◆ capturing non-taxable items in a Combat Zone-based situation (Scenario 4);
- ◆ balancing payrolls gross-to-net (all scenarios).

3.2 Gap Issue Overview

Scenario execution demonstrated limited functionality and gaps in the areas of triggers and retroactive processing. Between the two, the Trigger gap appears to be the most significant in that it adversely impacts other areas of Global functionality and military pay processing. Specifically, it is precisely a broad and consistently functioning trigger capability that segments pay periods into payable days requiring pro-ration and ultimately returning the correct entitlement/deduction amount. In the case of current and retroactive processing, consistent triggering provides programmatic update of all related pay authorization and computation factors the system needs to perform the prescribed action (i.e., either shut down or begin entitlement eligibility). Global Payroll analysis identified problems with both the secondary segmentation and retroactive aspects of the trigger capability.

Given the constraints of the Global Analysis to work completed with the delivered product, the Team was able to successfully establish triggering actions on PeopleSoft HRMS Job Data. Given the volume involved with military processing, the scope of the trigger capability will need to be much broader, and the degree of manual intervention minimized, to accommodate DIMHRS personnel/pay requirements. These Gaps are easily fixed using PeopleSoft utilities such as mass change or batch processing, or PeopleSoft developmental tools such as PeopleCode, PeopleTools and Application Engine.

3.3 Discussion of Gaps

3.3.1 Automating Pay Triggers and Eligibility Validation

In any payroll product, triggering is the capability of the application to programmatically “detect” or “recognize” changes in Personnel or other such pay-impacting factors, and then, again programmatically, adjust eligibility and computation profiles as needed. In this analysis, the Team demonstrated trigger capability primarily by inserting Personnel Actions on PeopleSoft HRMS Job Data. It was our initial understanding however that the scope of the functionality was much broader. Scenario results and discussion with PSC, as described in the following

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paragraphs, identified 3 essential elements to triggering: the table or component must be effective dated; employee ID (i.e., PeopleSoft HRMS EMPLID) must be the primary key; and there must be a link to enabling PeopleCode. Our analysis indicated that a number of key tables (e.g., Competency, Contract Data) are not so structured. Thus the Team identified that aspect of the capability as a Gap.

Beginning with Cycle 2, the analysis required developing triggers to authorize and compute entitlement based on changes in qualifying eligibility and computation factors. The intent with Cycle 2, Scenarios 1 and 2 was to build triggers directly from PeopleSoft HRMS Competency Management to authorize Diving Duty pay and Medical Variable Special Pay (VSP), based on Report of Diver Rating and Report of Medical Service Date, respectively. Therefore the team added Medical and Diving Competencies to the Competency table. Subsequently it was determined that the trigger could not be generated directly from the Competency component. Additional research and discussion with PSC representatives revealed that, in addition to the effective dating and EMPLID factors referred to above, delivered PeopleSoft Components must also be linked to special PeopleCode (5 lines) to generate a trigger. Additionally, PeopleSoft apparently delivers the needed PeopleCode only with PeopleSoft HRMS Job Data, Personal Data and employee address fields. Accordingly, with that limitation, military pay eligibility programmatically linked in legacy systems to skills, education, experience or position data could not be fully replicated in the Global product as delivered.

This limitation impacted preparation and analysis from then on from Cycles 2 through Cycle 6. The alternate solution that worked most consistently was to manually add an effective dated Personnel Action to PeopleSoft HRMS employee-level Job Data. In the case of Cycle 2, that also required accessing the Diver Rating and Intern/Non-Intern proficiency levels in PeopleSoft HRMS Competency to determine the correct rate of pay. The Team tried unsuccessfully, to use the PeopleSoft HRMS Location Table to generate triggers for location-based entitlements such as Overseas Housing Allowance, Overseas COLA and Basic Allowance for Housing. This “combination” trigger” from a single table to authorize OHA and O-COLA also did not work; the Team processed an HR action Permanent Change of Station to PeopleSoft HRMS Job Data to activate authorization for overseas-related entitlements.

The important point is that in a development/implementation phase the scope of the trigger functionality will have to be more fully explored—where it can be generated where it cannot—and where applicable the needed code will have to be added to additional tables according to identified requirements. Some of the inconsistent results described above could be attributed to scope limitations not allowing development of new objects, and consequently, trying to use available PeopleSoft tables and screens that had already been set-up or configured, even when they were not designed to be used for these purposes. DIMHRS will be able to use the appropriate tables or more fully leverage existing PeopleSoft database objects.

3.3.2 Retroactivity

Update of Pay-Impacting Fields.

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Retroactive processing in the legacy environment provides that processing Personnel or other pay-impacting actions to the member record also updates other logically related pay authorization and computation factors to yield the correct pay-ready profile in light of the most recent change processed. The DIMHRS Operational Requirements Document (ORD) identifies this as a processing feature that the new environment must replicate. Our analysis identified and documented one situation where this did not occur.

The Team processed a retroactive promotion action to PeopleSoft HRMS employee Job Data, effective 1 July 98. The record already showed a hire effective 5 May 98 and a transfer effective 1 October 98. The retroactive promotion posted the higher rate to the Job data, as of 1 July, but the higher rate did not carry forward beyond the 1 Oct 98 effective date of the Transfer. The transfer action still showed the compensation rate for the pre-promotion grade. That results in the employee's being paid at the higher Basic Pay rate only from the date of the promotion (7/1/98) to the transfer date, but thereafter underpaid at the incorrect pre-promotion grade because that is the rate linked to the most current (transfer) row.

All of this is by design in the product as delivered. The assumption is that a Personnel office that inserts the retroactive Personnel action will have to analyze the record for related impacts and perform the needed updates manually, if authorized, or if not authorized refer the action to someone else with the needed authorization. This approach may be practical for companies with small populations or minimal retroactive actions, or both. In the DoD environment, however, neither of those factors is present. Due to the massive population and the frequency of retroactive reporting, this system condition becomes a constraint that is unacceptable.

This leads to the next level of functionality that must be required of the system, again as documented in the ORD. All Personnel or other pay-impacting actions processed to member Job Data, whether processed retroactively or currently, must programmatically update other system information that is logically related to the action processed and pay types impacted. That includes member level Personnel statues affecting pay authorization and rates affecting computation, either already on the record or posted subsequently. For instance, assuming that information in the PeopleSoft HRMS Competencies portion of the employee record is used as a determining factor for certain types of pay, changes in the competencies record must directly trigger corresponding changes to tables and rates that determine entitlement amount due. In the case of Diving Duty referred to above, if the rule is that after the 6th qualifying dive within a predefined period of time, the employee's diver rating should be changed to a different value, then there should be no action required to effect this change, other than the recording of the 6th dive. The same constraints mentioned above, relative to volume and DoD personnel/pay resources, also apply here. These retroactive and current processing update requirements ensure both efficiency of supporting operations and integrity of interrelated system information governing pay eligibility and computation.

3.3.3 Forwarding Method versus Corrective Method

Global delivers two methods of retroactive processing. The Forwarding method's distinguishing feature is that it carries all prior period adjustments to the current period and displays on the current Results Calendars only the net adjustment. The Forwarding Method is the one PSC

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recommends because it is the method that better fits with tax processing. The Corrective Method on the other hand records and displays all prior period adjustments, in their entirety, in the Results Calendar for the retro pay periods in question.

The Team tried each in the course of this analysis. With regard to Forwarding, the net adjustments did display on the current calendar as advertised, but just that netting method could cause accounting problems when the Team needed to impact military pay appropriations for gross amounts. As for the purported tax advantage, because Global is not delivered with tax-processing modules, the quality of integration with tax processing could not be tested and validated. The Corrective Method displayed data in full amounts in prior periods as described above; that is beneficial for accounting and reporting requirements. However the Team discovered that the accumulators for the prior periods were not updated for the retroactive adjustments; the adjustments were all reflected in the current period accumulator buckets. That, especially if the retroactive period crosses calendar years, could have tax reporting implications.

Finally, the onset of severe weather in New Orleans, LA required a transfer of the test database back and forth several times between JR&IO Headquarters in Arlington and the New Orleans site. As is noted in Cycle 4 discussion, that unusual situation played a role in some of complications encountered with Cycle 4. In the end, after 2 days of struggling with problems in the cycle results, the Team decided to recover the database back to a state where it was confident of its configuration up to that point. Subsequent to the recovery, the problems were resolved and analysis moved quickly on to Cycles 5 and 6. Database support and recovery is thus critical to analysis progress.

3.4 Scenario Execution

3.4.1 Cycle 1, Scenario 1

Synopsis

Cycle 1 – Pay Period February 16 through February 28

The scenario demonstrates an Air Force Medical Officer accession for a partial 28-day month. The system automatically starts and pays Basic Pay, Basic Allowance for Housing, Basic Allowance for Subsistence and Serviceman Group Life Insurance for a partial 28-day month.

Objective: Verify system automatically starts pay entitlements and deductions on accession, effective 20 February 02, determines pay rates based on pay rate tables, and computes pay for partial month.

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Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Air Force Medical Officer accessed effective 20 February 2002, with Basic Pay Date 5 April 2000.	✓		Record created with correct Enter Active Duty Date and Pay Date
Basic Pay compensation - \$769.12.	✓		\$769.12; correctly pro-rated for 11 days
Basic Allowance for Subsistence - \$61.00.	✓		\$61.00. correctly pro-rated for 11 days
Basic Allowance for Housing, with Dependent Rate – \$514.43	✓		\$514.43; correctly pro-rated for 11 days
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Officers not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$8.00 correctly deducted. Full deduction because is second semi-month payroll.

Discussion

3.4.2 Cycle 1, Scenario 2

Synopsis

The scenario demonstrates an Army Enlisted Member accession for a partial 28-day month. The system automatically starts and pays Basic Pay, Basic Allowance for Housing, Basic Allowance for Subsistence, Serviceman Group Life Insurance and Armed Forces Retirement Home (AFRH) for a partial 28-day month.

Objective: Verify system automatically starts pay entitlements and deductions on accession, effective 17 February 02, determines pay rates based on pay rate tables, and computes pay for partial month.

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Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Army Enlisted member accessed effective 17 February 2002, with Basic Pay Date 14 March 2000.	✓		Record created with correct Enter Active Duty Date and Pay Date
Basic Pay - \$608.30	✓		\$608.30 correctly pro-rated over 14 days, which includes the “29 th and 30 th days.”
Basic Allowance for Subsistence - \$112.70.	✓		\$112.70; correctly pro-rated over 14 days which includes the “29 th and 30 th days.” \$. 04 rounding.
Basic Allowance for Housing, Partial Rate – \$3.64	✓		\$3.64; correctly pro-rated over 14 days which includes the “29 th and 30 th days.”
Armed Forces Retirement Home (AFRH) Deduction - \$0.50	✓		\$0.50; Enlisted is subject to AFRH. Full month deduction for second semi-month payroll.
Servicemembers Group Life Insurance (SGLI) Deduction - \$16.00	✓		\$16.00 correctly deducted. Full month deduction for second semi-month payroll.
Discounted Meal Rate (1st day 25%) - \$1.69	✓		\$1.69; 1 day pro-rated
Discounted Meal Rate (11 Days @ full rate) - \$74.25	✓		\$74.25; 11 days pro-rated. This is day-for-day deduction does not include “29 th ” and “30 th ” day

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Discussion

3.4.2 Cycle 1, Scenario 3

Synopsis

The scenario demonstrates an Army Enlisted Member accession for a partial 28-day month. The system automatically starts and pays Basic Pay, Basic Allowance for Housing, Basic Allowance for Subsistence, Serviceman Group Life Insurance and Armed Forces Retirement Home (AFRH) for a partial 28-day month.

Objective: Verify system automatically starts pay entitlements and deductions on accession, effective 28 February 02, determines pay rates based on pay rate tables, and computes pay for partial month.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Navy Enlisted member accessed effective 28 February 2002, with Basic Pay Date 28 March 2002.	✓		Record created with correct Enter Active Duty Date and Pay Date
Basic Pay compensation - \$130.35	✓		\$130.50 pro-rated correctly for 3 days (includes “29 th and 30 th days.”)
ENL Basic Allowance for Subsistence - \$24.16	✓		\$24.16 correctly for 3 days (includes “29 th and 30 th days.”)
Basic Allowance for Housing, with Dependent Rate – \$70.40	✓		\$70.40; correctly for 3 days (includes “29 th and 30 th days.”)
Armed Forces Retirement Home (AFRH) Deduction - \$.50	✓		\$0.50; full month for single, second semi-monthly payroll
Servicemembers Group Life Insurance (SGLI) Deduction - \$16.00	✓		\$16.00 full month for single, second semi-monthly payroll
Discounted Meal Rate (First Day 25% x 6.75) - \$1.69	✓		\$1.69; day-for-day deduction, not based on 30-day month

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Discussion

3.4.4 Cycle 1, Scenario 4

Synopsis

Weekly Payrolls 16 – 23 Feb 02 and 24 Feb – 2 March 02

Synopsis: The scenario demonstrates a Marine Corps Reservist accession for a partial 28-day month. The system automatically starts and pays Basic Pay for 2 periods of Inactive Duty Training (IDT) and deducts for Serviceman Group Life Insurance.

Objective: Verify system automatically starts pay entitlements and deductions on accession, effective 17 February 02, determines pay rates based on pay rate tables, and computes pay for partial month.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Access Reservist and Report 2 periods of Inactive Duty Training for 18 February 02	✓		Record created with correct Basic Pay Date
Basic Pay compensation: Weekly Payroll 17 - 23 February 02 \$116.82 (2 IDT units reported for 17 Feb)	✓		\$116.82 (2 units x daily rate of \$58.41)
Weekly Payroll 24 February – 2 March 02: Nothing reported - \$0.00	✓		\$0.00
ENL Basic Allowance for Subsistence - \$0.00 both weekly payrolls	✓		\$0.00 Reservist on IDT not authorized BAS
Basic Allowance for Housing– \$0.00 both weekly payrolls	✓		\$0.00 Reservist on IDT not authorized BAS
Armed Forces Retirement Home (AFRH) Deduction - \$0.00 both weekly payrolls	✓		\$0.00 Reservist on IDT not subject to AFRH

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Servicemembers Group Life Insurance (SGLI) Deduction			
17-23 February 02 - \$16.00	✓		\$16.00 full deduction for single weekly payroll ending in Feb
24 Feb-2 Mar 02 - \$16.00 arrears	✓		\$16.00 arrears for first pay period ending in March

Discussion

The primary objectives were to authorize entitlement and pay members based on pay authorization/computation factors, taking into account 29th/30th “days where applicable. Entitlement and deduction had to be prorated based on segmentation and the accession date. The pay for the drilling reservist had to be day-for-day, without the 29th and 30th “days.” With the Accession event, the scenario teams input into PeopleSoft HRMS screens all the data elements needed for pay eligibility determination and computation. That included grade, w or w/o dependents, location, positive input for IDT drills, SGLI coverage election, and Essential Unit Messing (EUM) status.

Results. Initial Global results included incorrectly computed amounts and incorrect entitlement/deduction authorization determinations. This payroll run in effect served as the first diagnostic for the specialized set-ups completed to date. Accordingly the team identified several areas that had to be modified to correct amounts and authorizations. For example, members received Diving Duty, Overseas COLA and Medical Variable Special Pay (VSP) even though not authorized. That happened because the supporting formulae did not include a factor to identify and filter out unauthorized members. A similar situation was noted and resolved with the Reserve payroll. There the member had incorrectly received BAS and BAH with the IDT pay, and AFRH was incorrectly deducted.

After analysis and modifying set-ups as needed over 3 additional payrolls, the fifth payroll was correct in computation and authorization. For Active Duty members, pro-ration and segmentation occurred as needed with Basic Pay, BAH, and BAS. The SGLI and AFRH deductions were taken in entirety as required by the second semi-monthly pay period encompassing the accession dates. The BAS Discounted Meal Rate deduction was correctly taken for the Army member for the 12 days in the Essential Unit Messing Status, with the first correctly deducted at the reduced rate. For the Reservist on an IDT drill, the member correctly received pay for 2 IDT units reported via positive input, or 2 full days Basic Pay. For the second week beginning in February but ending in March, the Reservist did not receive any pay but

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Global established a SGLI deduction arrears as required. Problems identified and resolved were as follows:

Active Duty

Basic Pay: The same base pay amount first retrieved from the Salary Table was being carried from one record to the next. Correction was to add a parameter to the Array, which reads the table, to “reload for each payment.” Subsequent to correction all Basic Pay amounts were correct and prorated based on partial month to include “29th and 30th “day”

Diving Duty: All members received \$1 although none were authorized. The payment amount was caused by a flat rate listed on set-up as a placeholder until completed. Also, the Diving Duty Earnings element set-up was not properly linked to the supporting formula and variable. This caused the system to bypass eligibility tests. The set up was completed to include the link to the supporting formula, which contains the qualifying criteria. Because none were authorized for this cycle, the correction prevented Diving Duty payment.

Overseas Cost of Living Allowance (OCOLA): This entitlement was paid on all records even though no one was eligible for this cycle. Similar to Diving Duty above, it was caused by flat rate listed on set-up, and the set-up not being properly linked to supporting formula and variable. The set up was completed and linked to supporting formula, which contained the eligibility factors, For subsequent Cycle 1 payrolls, O-COLA not paid.

Reservist on IDT Drills

Basic Pay: Initially the 2 drill units that were reported via positive input did not result in payment to the member. The reason was that the Basic Pay daily rate formula had not been linked to the units. After the set up was corrected, Basic Pay for IDT drills paid out correctly.

SGLI: For the second week processed, 24 February - 2 March, Global correctly computed no pay due, but SGLI was not placed in arrears as required. The problem was that the relevant formula was keying on the pay period begin date, 24 February, determining that SGLI had been collected in its entirety for the previous pay period, and did not establish the arrears. The team modified to key to look at pay period end date, and SGLI arrears was established as needed.

BAS: Active members received both Officer and Enlisted BAS. A decision point was added to formula to identify grade. Only one BAS now being paid based of grade.

BAH and BAS for IDT: Global paid BAH and BAS during IDT duty, although a reservist on an IDT drill is not eligible to receive BAH and BAS. The team modified the IDT formula to search for and exclude based on Reservist Business Unit.

3.4.3 Cycle 2, Scenario 1

Synopsis

Cycle 2 – Pay Period 1 – 15 March 02

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A Medical Service Date of 25 March 96 is reported effective 20 February 02.

Objective: The system will automatically establish entitlement and compute Medical Variable Special Pay retroactive to 20 February 02. Other pays and deductions will continue as previously computed based on pay rate tables and pro-rating for partial months.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Report of Medical Service Date of 25 Mar 96	✓		Record correctly updated with Medical Service Date
Basic Pay compensation - \$1048.80.	✓		\$1048.80; ½ full monthly rate
Medical VSP - \$33.68	✓		\$33.68 (20-28 Feb)
Medical VSP - \$50.00	✓		\$50.00 (1/2 full \$100 rate for current period) (SEE NOTE IN DISCUSSION BELOW RE GAP ON TRIGGERS)
Basic Allowance for Subsistence - \$83.19.	✓		\$83.185 rounding difference; ½ full month rate (SEE NOTE IN CYCLE 2 DISCUSSION BELOW)
Basic Allowance for Housing, with Dependent Rate – \$701.50	✓		\$701.50; ½ full month rate of \$1403.00
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Officers not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$4.00	✓		\$4.00 correctly deducted. ½ Full deduction because this is first semi-month payroll for month.

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Discussion

3.4.4 Cycle 2, Scenario 2

Synopsis

A Diver Rating of First Class is reported effective 17 February 02. The member also receives a longevity increase effective anniversary date of 14 March 02

Objective: The system will automatically establish entitlement and compute Diving Duty Pay retroactive to 17 February 02. Other pays and deductions will continue as previously computed based on pay rate tables and pro-rating for partial months.

Expected Results and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Army ENL member Report of Diver Rating, First Class effective 17 February 02	✓		Member record correctly updated for First Class Diver rating.
Basic Pay compensation - \$657.21	✓		Basic Pay \$564.45 (1-13 Mar @43.45) + 92.36 (14-15 Mar @46.18) = \$657.21 Longevity increase correctly processed
Diving Duty – \$207.83	✓		Dive Duty \$207.83 - 100.33 (17-28 Feb @7.16)+ \$107.50 (1-15 Mar @ 7.16) (SEE NOTE IN DISCUSSION BELOW RE GAP ON TRIGGERS)
Basic Allowance for Subsistence - \$120.80.	✓		\$120.80. ½ full month rate.
Basic Allowance for Housing, Partial – \$3.90	✓		\$3.90; ½ full month rate
Armed Forces Retirement Home (AFRH) Deduction - \$0.25	✓		\$0.25; ½ full month rate
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$8.00 ½ full premium on \$200,000 coverage amount

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
BAS Discounted Meal Rate Deduction – 101.25	✓		101.25 15 days @ 6.75

Discussion

3.4.5 Cycle 2, Scenario 3

Synopsis

A Diver Rating of First Class is reported effective 5 March 02.

Objective: The system will automatically establish entitlement and compute Diving Duty Pay beginning 5 March 02. Other pays and deductions will continue as previously computed based on pay rate tables and pro-rating for partial months.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Navy ENL with Report of Dive Rating First Class	✓		Effective Date 5 March 2002. HR record now correctly updated.
Basic Pay compensation - \$651.75	✓		\$651.75; 15 days full pay period
Dive Duty Pay - \$78.87	✓		\$78.83; 11 days with rounding difference of \$.04. SEE NOTE IN DISCUSSION BELOW RE GAP ON TRIGGERS
Enlisted Basic Allowance for Subsistence - \$120.80.	✓		\$120.80. correct for full 15 days
Basic Allowance for Housing, with Dependent Rate – \$352.00	✓		\$352.00; correct for full 15 days

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Armed Forces Retirement Home (AFRH) Deduction - \$0.25	✓		\$0.25; correct for semi-monthly pay period
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$8.00 correctly deducted; ½ rate for first semi-month payroll.
BAS Discounted Meal Rate Deduction - \$101.25	✓		\$101.25 15 days @ full rate

Discussion

3.4.6 Cycle 2, Scenario 4

Synopsis

Weekly Payrolls 27 February – 2 Mar and 3 – 9 Mar 02

The member reports for an Active Duty tour of less than 30 days as an Inactive Reservist. Tour dates are 27 February – 10 March 02.

Objective: Verify Global automatically starts and computes entitlements Basic Pay, BAH and BAS and deductions SGLI and BAS Discounted Meal Rate associated with the Active Duty Short tour.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Marine Corps Reservist on Short Tour	✓		Record correctly updated to reflect tour start date and entitlement/deduction eligibility.
Basic Pay compensation - \$642.51.	✓		\$642.51; (27 Feb-2 Mar \$233.64 + 3-9 Mar \$408.87)

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Basic Allowance for Subsistence - \$88.58.	✓		\$88.58; (27 Feb-2 Mar \$32.21 + 3-9 Mar \$56.37)
Basic Allowance for Housing, with Dependent Rate – \$476.66	✓		\$476.66; (27 Feb-2 Mar \$173.33 + 3-9 Mar \$303.33)
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Reservist not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$16.00	✓		\$16.00 includes collection of arrears from previous payroll.
BAS Discounted Meal Rate – \$69.19	✓		\$69.19; (\$1.69 (27 Feb) + \$20.25 (28 Feb – 2 Mar) + \$47.25 (3-9 Mar); first day 27 Feb at reduce rate.)

Discussion

Cycle 2 Discussion

Results: Problems were identified and corrected, as described below. Except as described below, Global processed correctly the first time all other entitlements, deductions and accumulators, to include pro-ration and segmentation where applicable.

Longevity. The delivered Global functionality does not post an effective dated row to Job Data for longevity increases. This has been a problem since Joint Initial Analysis of 2001. For this analysis, PSC developed a workaround using other Global components by defining an “Date Event” equal to Service Date + 2yrs, +4yrs, +6yrs, etc. When the derived “anniversary date” falls within the pay period, it segments the pay period into slices before the anniversary date and one beginning with the anniversary date. Then the derived daily rate is applied to payable days to arrive at slice amounts. After the first payroll run, the Team had to de-bug the new set-up to pull 2002 monthly rates rather than 2001. The process reran and the results were correct. The consensus among the group was that above work-around is probably not the real world solution, but discussion also identified differing preferences for how to execute the longevity increase in the live environment; either with effective dated rows on Job Data or dynamically derived. Discussion also tentatively identified a potential SQR-based procedure which would post to Job Data and provide the needed audit trail. That and other potential solutions require additional analysis during subsequent analysis phases to include that of D/I.

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Medical VSP Eligibility. Only the Air Force member in scenario 1 was properly authorized for Medical VSP, but the Army and Navy members also received payment. A lead-off step was added to the VSP formula to look for the qualifying factor.

Retroactive Diving Pay. This pay did not process for Scenario 2. Database support staff cleaned up trigger table after identification of Trigger issue described below. The clean up included the retro Diving Duty trigger. The Team changed strategy to established trigger on Job Data to report a Diving Competency. The Team reran payroll and the amounts came out correct.

BAS Discounted Meal Rate Deduction. Cycle 2 results did not show this deduction where expected. The cause was traced to a premature “exit” statement in the formula. The exit prevented the formula from going on to the part where the EUM Status Code of “Y” carries over from previous pay period and thus payable days equal pay period days. This became apparent only with Cycle 2.

Issues Identified

Triggers Gap. The intent with Cycle 2, Scenarios 1 and 2 was to build triggers directly from PeopleSoft HRMS Competency Management to authorize Diving Duty pay and Medical Variable Special Pay (VSP), based on Report of Diver Rating and Report of Medical Service Date, respectively. Therefore the team added Medical and Diving Competencies to the Competency table. Subsequently it was determined that the Team could not generate the trigger directly from the Competency component. Additional research and discussion with PSC representatives revealed that, in addition to the effective dating and EMPLID factors referred to above, delivered PeopleSoft Components must also be linked to special PeopleCode (5 lines) to generate a trigger. Additionally, PeopleSoft apparently delivers the needed PeopleCode only with PeopleSoft HRMS Job Data, Personal Data and employee address fields. Accordingly, with that limitation, military pay eligibility programmatically linked in legacy systems to skills, education, experience or position data could not be fully replicated in the Global product as delivered.

Retroactive Processing. Global Payroll provides either a “corrective” or “forwarding” method of retroactive processing. The primary difference is that corrective will reverse previous entries in their entirety and then display the full correct amount. Forwarding nets previous and corrected amounts and displays only the change. Preliminary discussion indicated that neither might be an exact match for DIMHRS requirement. For Cycle 2, a forwarding method was used. This was the first look at actual results. In all cases Global computed and displayed the correct net retroactive adjustment to the retro period in question. Review of the supporting detail showed that the retro period begin and end dates are not associated with the computed amount. Although the amount is displayed to the pay period(s) in which the retro period falls, appropriation and retirement points accounting generally requires exact # of days and begin/end dates; the latter particularly important when the retroactive period crosses fiscal year changes. For next cycle, the Team ran a corrective method to evaluate what it produces and then evaluate both in light of requirement.

Rounding. Using Semi-monthly pay periods in lieu of monthly pay periods with a mid-month disbursement appears to cause rounding errors. For example, the monthly Officer BAS amount

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of \$166.37 pays out \$83.19 per semi monthly pay periods yielding a \$.01 per month overpay. The Earnings Element set-ups contain rounding defaults, which are currently set to rounding up the computed amount. This is computation issue and will have to be researched to see how computed amounts can be adjusted as needed over time.

3.4.7 Cycle 3, Scenario 1

Synopsis

Active Semi Monthly Pay Period of 15 – 31 March 02

Air Force Medical Officer receives Medical VSP increase due to change from Intern to Non-intern Status, effective 19 March 02, and increase in Medical Years Service to 6 years, effective 25 March 02.

Objective: Verify system automatically computes increased Medical VSP based on change in pay factors and other pays and deductions continue as previously computed based on pay rate tables and pro-rating for partial months.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed updates to member record as described above.	✓		Member record accurately reflects non-intern status and 6 years Medical Years Service
Basic Pay compensation - \$1048.80	✓		\$1048.80 ½ full month rate
Medical VSP - \$293.33	✓		= \$293.332; \$10.00 (16-18 Mar) + \$283.332 (19-31 Mar); slight rounding difference.
Basic Allowance for Subsistence - \$83.19	✓		\$83.185 rounding difference. (SEE NOTE ON ROUNDING IN CYCLE 2 DISCUSSION ABOVE.)
Basic Allowance for Housing, with Dependent Rate – \$701.50	✓		\$701.50; ½ full month rate
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Officers not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$4.00	✓		\$4.00 second ½ of full month deduction

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Discussion

Because the member changed from Medical Intern status to Medical Non-Intern status effective 3/19/02, and achieved over 6 years on Medical Years of Service effective 3/25/02, Global had to segment the Medical VSP into 3 overlapping segments. They computed amounts due for three periods with three different rates of pay: Medical VSP Intern, Non-Intern < 6 yrs, and Non-Intern>=6yrs.

Global ultimately paid the correct amounts after several runs, analysis and modification to set-ups, and then rerun. However in the process three issues were identified:

(1) Triggers. Could not generate a trigger directly from PeopleSoft HRMS Competencies even though The Team successfully established Medical Competency and Intern/Non-Intern Proficiencies with Competencies. (This has been identified as a Gap; see above as part of Cycle 2 discussion and in greater depth in Section 3 of this report.) As an alternate solution the team had to insert an effective dated HR action on PeopleSoft HRMS Job Data to report 'Data Change' Reason code of 'MED'. It was preferred that the input to the competencies would trigger this data.

(2) Rounding. In the first pay period of the month, BAS Officer will round to \$83.19. In the second pay period of the month, BAS Officer will also round to \$83.19. The monthly amount paid for BAS Officer would be \$166.38. The member is due \$166.37 for the month for BAS Officer. This results in an overpayment of \$0.01. This will occur on any odd numbered monthly entitlement amount. If rounding rules for this earnings type had been set to round down, then each of the pay periods would round to \$83.18 and member would result in a monthly amount of \$166.36, an underpayment of \$0.01.

(3) The third issue is not seeing the dates for the amounts when Medical VSP computed for the period of less than six years (\$83.33, March 19-24) and six years and greater (\$200.00, March 25-31). This could have accounting implications if the slice period crosses fiscal years.

3.4.8 Cycle 3, Scenario 2

Synopsis

Army enlisted diver gets a new Diver Rating of Master effective retroactive to 17 February 02

Objective: Verify system automatically computes increased Diving Duty Pay effective retroactively to 17 February 02 to include prior and current pay periods at the new rating. Other pays and deductions continue as previously computed based on pay rate tables and pro-rating for partial months.

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Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed new rating of Master Diver	✓		Member HR record correctly reflects Diver Competency with Proficiency of Master
Basic Pay compensation - \$692.70.	✓		\$692.70; ½ full month rate
Diving Duty Pay – \$290.83 Retroactive 17 Feb – 15 Mar 29@11.333= +\$328.66 (Master Rating) Less: 17 Feb – 15 Mar 29@ 7.1666= \$207.83 (First Class Rating) Current: 16-31 Mar 15@ 11.333= +170.00 (Master Rating)	✓ ✓ ✓		\$290.833 rounding Retroactive: Net +58.333 (17 – 28 Feb Pay Calendar; net between First Class and Master Rating) Net +62.50 (1-15 Mar Pay Calendar; net between First Class and Master Rating) Current: \$170.00 (16-31 Mar Pay Calendar @ Master Rating)
Basic Allowance for Subsistence - \$120.75.	✓		\$120.75. ½ full month rate
Basic Allowance for Housing, with Dependent Rate – \$3.90	✓		\$3.90 ½ full month rate
Armed Forces Retirement Home (AFRH) Deduction - \$0.25	✓		\$0.25; ½ full month rate
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$8.00 ½ full month rate
BAS Discounted Meal Rate - \$108.00	✓		\$108 (16 days @ 6.75, day-for-day from the 16 th through 31 st)

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Expected and Actual Results

The PeopleSoft HRMS Competency Table was used to maintain the Diver rating. It was a fit for maintaining the Master, First Class and Combat diver ratings. As with other scenarios, the Team could not generate a trigger directly from the Competency Table; the report of a Diving Competency had to be inserted on the PeopleSoft HRMS Job Data table.

The Salary Grade Table was reconfigured to hold the Army Diving Rates. Three steps were populated: Step 1 for Master; Step 2 for First Class; and Step 3 for Combat.

This scenario was run 3 times with errors in Diving Duty and OHA the first 2 times. The Diving Duty amount was corrected by inserting the retro HR action on Job data. The Forwarding method of retroactivity was used and as shown above for the period 17 Feb – 15 March displayed only the net between what had been paid at the First Class rating and that paid at the new Master rating. That has accounting implications because the appropriation must be impacted in full both for the reversal and the corrected amount.

The OHA error was eliminated by adjusting the eligibility factors to work with the PCS action on Scenario 3, where the OHA was payable. This is a problem in live environment as the DoD processing volume will require better filtering factors to be set up front and not have to modify them over time.

3.4.9 Cycle 3, Scenario 3

Synopsis

Navy enlisted diver has a Permanent Change of Station (PCS) to Japan, effective 23 March 02, Accompanied Status with 4 dependents in the overseas area, quarters not assigned. Begin entitlement to OHA and O-COLA.

Objective: Verify system automatically starts entitlement to O-COLA and OHA effective with PCS arrival of 23 March 02. Other pays and deductions continue as previously computed based on pay rate tables and pro-rating for partial months.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed PCS move to Japan and record changes to quarters and dependencies status.	✓		Member record correctly shows quarters unassigned and 4 dependents; JFTR locality code of JA061.
Basic Pay compensation - \$651.75.	✓		\$651.75; ½ full month rate

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Diving Duty – \$107.50	✓		\$107.50 ½ full month rate
Basic Allowance for Subsistence - \$120.80	✓		\$120.80; ½ full month rate
O-COLA – \$179.20	✓		\$179.20; 9 days prorate (day for day)
OHA – \$445.75	✓		\$445.75; 8 days (day for day, different start date from O-COLA)
Armed Forces Retirement Home (AFRH) Deduction - \$0.25	✓		\$0.25; ½ full month rate
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$8.00 ½ full month rate
Discounted Meal Rate - \$42.19	✓		\$42.19 (1@ 1.69) + (6@6.75) 16-22 March before PCS move.

Discussion

To support the authorization and computation objective, this scenario required using a number of PeopleSoft data fields and screens whose designed use is not consistent with the scenario processes. For example, the PeopleSoft Credit Card Table was used to store rent sharer and rent amount needed to compute the OHA amount due the member. Use of this table also required input of a Credit Card Vendor and Expiration Data, which do not relate to Overseas Housing Allowance. Similarly, fields on the Business Expense Table were used to hold utility-related data, also used by the computation. Although the fit was less than ideal, Global was able to access and use them correctly as the OHA amount came out correct.

To record the Permanent Change of Station (PCS), an effective dated HR action was inserted in member Job Data to indicate date of Action = Transfer, and Reason = CHG (Permanent Change of Station). This was required to establish a trigger to start/stop entitlements. The member's location was changed on the Work Location panel to reflect the member's new duty location as Yokosuka Naval Air Station in Japan (7098709878). In Personal History, a row was inserted in member address history area of the Address History panel to indicate change in home address location. Each dependent/beneficiary record was also checked to indicate "Address same as Employee," to indicate "Command Sponsored Dependents for purposes of determining O-COLA rates.

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Finally for BAS Discounted Meal Rate deduction, another effective dated HR action was inserted in member Job Data to indicate date of PCS Action = Data Change, and Reason = TRM (Terminate EUM). The "Full Time Student" flag in Personal data was also removed, to indicate member is no longer under EUM.

The reader should note the triggers to impact OHA and O-COLA did not work from the Location Table as was initially intended, and neither did the EUM flag directly trigger the change to the deduction. The HR actions on Job Data were necessary.

3.4.10 Cycle 3, Scenario 4

Synopsis

Reservist assigned to Extended Active Duty Tour of more than 20 weeks, effective 25 March 02, with entitlement to Basic Pay, BAH, BAS and deduction for SGLI.

Objective: Verify system automatically starts entitlements and deductions as identified above and determines pay rates based on pay rate tables and pro-rates pay for partial month.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Marine Corps Reservist assigned to Active Duty tour.	✓		Tour Begin Date: 25 Mar 02
Basic Pay compensation - \$350.46	✓		\$350.46; 6 days day-for-day correctly pro-rated.
Basic Allowance for Subsistence - \$48.32	✓		\$48.32. correctly pro-rated for 6 days
Basic Allowance for Housing, with Dependent Rate – \$260.00	✓		\$260.00; correctly pro-rated for 6 days
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Reservists not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$0.00	✓		\$0.00 correctly deducted. March premium paid in previous March pay period.

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Discussion

Scenario 4.4 mobilized a reservist to full time active duty. By doing so the scenario demonstrated the capability of PeopleSoft to pay a member who is moved from a weekly pay group to a semi-monthly pay group. It also showed the automatic payment of Basic Allowance for Subsistence and Basic Allowance for Housing upon receipt of Basic Pay.

An effective dated (March 25, 2002) job row was added to the employee record with an action of data change and a reason of status change. Pay Group was changed to MAS, Marine Semi-monthly, on the Job Data Payroll tab.

Basic pay rate was determined from the members' grade and years of service. The member's grade was stored in the PeopleSoft grade field and the years of service was determined by storing the member's pay entry base date in the PeopleSoft "service date" field on the Job Data Employment Information page. Actual years-of-service was determined by subtracting the date in the "service date" field from the pay period end date. The years of service was then converted to a "step" to match the configuration of the delivered PeopleSoft Salary Grade Table where the rates were stored. Basic pay was a fairly good fit.

BAH eligibility and rate were determined using PeopleSoft delivered functionality to create "arrays," "brackets," and "formulae". In this cycle, the test record had a spouse for the long active duty tour. As configured, the member was credited the correct BAH rate based on dependents, grade, and location (BAH I location rates were used instead of BAH II table rates). Global results matched the expected results but it required the PeopleSoft consultants to revise and correct setups to only credit pay for the period of active duty, March 25 – 31.

3.4.11 Cycle 4, Scenario 1

Synopsis

Semi Monthly Pay Calendar for Period 1-15 April 02

Air Force Medical Officer receives longevity increase effective anniversary date of 6 April 02. All other entitlements and deductions continue as previously established and computed.

Objective: Verify system automatically starts entitlements and deductions as identified above and determines pay rates based on pay rate tables and pro-rates pay for partial month.

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Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
No HR input required. Global acts on Basic Pay anniversary date established at hire.	✓		Anniversary Date 6 April 02
Basic Pay Compensation – 1-5 April 02 - \$349.60 6-15 April 02 - \$727.70	✓		\$1077.30; \$349.60 + \$727.70 correctly segmented and pro-rated.
Medical VSP - \$500	✓		\$500.00 ½ full month non intern rate
Basic Allowance for Subsistence - \$48.32	✓		\$48.32. correctly pro-rated for 6 days
Basic Allowance for Housing, with Dependent Rate – \$701.50	✓		\$701.50; ½ full month rate
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Officer not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$4.00 ½ full month rate.	✓		\$4.00 correctly deducted. ½ full month rate

Discussion

The purpose was to verify Global automatically updates the member's pay based on the anniversary of the service date. Member is an 01 with less than two years of service (Service date of April 20, 2000). Effective April 20, 2002, member's rate of basic pay should reflect the 01 Rate at two years of service. The Basic Pay Date was stored in Job Data, Employment hyperlink, Service Date. This field was populated at time of hire. No additional input was done for this scenario.

Global results matched expected for all entitlements and deductions. Global paid Basic Pay 30+ at \$1077.30. That was an addition of segmented periods before and beginning step increase, \$349.60 for April 1-5 and \$727.70 for April 6-15. Basic Pay paid correctly and longevity increase functionality demonstrated by formula documented and described in Cycle 2 discussion above.

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3.4.12 Cycle 4, Scenario 2

Synopsis

Army enlisted member goes from Government Quarters Assigned to Not Assigned, effective 3 April 02. Entitlement to BAH changes to Without Dependent Type I. All other entitlements and deductions continue as previously.

Objective: Verify system automatically starts entitlements and deductions as identified above and determines pay rates based on pay rate tables and pro-rates pay for partial month.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed change to Government Quarters Status from Assigned to Non-Assigned.	✓		HR record now shows Quarters Not Assigned effective 3 April 02
Basic Pay Compensation – \$692.70	✓		\$692.70 - 15 days or ½ full month rate
Diving Duty Pay - \$170	✓		\$170 - 15 days or ½ full month rate
Basic Allowance for Subsistence - \$120.75	✓		\$120.75 - 15 days or ½ full month rate
Basic Allowance for Housing Partial \$0.52 (2 days) Single \$211.90 (13 days)	✓		\$212.42; correctly pro-rated 2 days for Partial and 13 days for single rate.
Armed Forces Retirement Home (AFRH) Deduction - \$0.25	✓		\$0.25; ½ monthly rate
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$8.00 ½ month's

Discussion

The primary purpose of this scenario was to test a change in BAH factors. The member was changed from residing in the barracks receiving Partial BAH to living in non-government quarters without dependents. The BAH rate had to change from partial to single. PeopleSoft

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HRMS delivered does not contain a special field to store member's quarters type, therefore the Team selected an unused address field within PeopleSoft HRMS Personal Data. That was populated with "barracks" to return BAH Partial authorization; "Non-Govt" to return "No Government Quarters used; and "Family Quarters" to return Government Quarters Available.

The eligibility checks established for BAH did not initially work as intended. The member received BAH with dependents instead of without. The problem was traced to the Global formula that determined dependents. After correction, the member was paid correctly.

It took 6 separate payroll run to get pay right for this scenario. Part of the problem can be attributed to database transfers between Arlington and New Orleans because severe weather forced the New Orleans Center to shut down. That added complication to an already-complicated set-up to demonstrate that Global could effect the BAH change. During the first 5 runs, pay and deductions were at times correct and at other times completely off, with no apparent logical explanation. Finally, after almost 3 days of trouble-shooting the scenario results, making modifications and rerunning unsuccessfully, the decision was made to recover the database in the state it was 48 hours previous. Cycle 4 was re-run with few differences, attributable to the sort of error described above with BAH dependent determination. They were corrected and the cycle ran successfully to completion.

3.4.13 Cycle 4 Scenario 3

Synopsis

Navy enlisted member gets Promotion from E3 to E4, effective 5 April 02, with accompanying rate increase for Basic Pay, OHA, Overseas COLA. Other entitlements and deductions stay the same

Objective: Verify system automatically updates above entitlement rates based on Promotion event and determines pay rates based on pay rate tables and pro-rates pay for partial month.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed Promotion to Job Data	✓		HR record now shows grade of E4 effective 5 April 02.
Basic Pay Compensation - \$703.12 \$173.80 (E3 @ 4 days) \$529.32 (E4 @ 11 days)	✓		\$703.12 correctly segmented and pro-rated.

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Dependent OCOLA - \$309.47 \$79.68 (E3 @ 4 days) \$229.79 (E4 @ 11 days)	✓		\$309.47 correctly segmented and pro-rated.
Basic Allowance for Subsistence - \$120.75	✓		\$120.75 ½ monthly rate (NOTE: previous cycles' rate was \$120.80. Difference due to fact that initialized rate changed to 241.50 from 241.60.)
Overseas Housing Allowance - \$835.79 (15 days). OHA should have been segmented and pro-rated based on the promotion event. Did not occur because Promotion Event set-up did not include link to OHA. This is correctable by adding an OHA link to the set-up.		✓	\$841.30; Global bracket accessed higher E4 rate of \$1682.60 for entire period because of no segmentation based on the promotion.
Armed Forces Retirement Home (AFRH) Deduction - \$0.25	✓		\$0.25; ½ monthly rate
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$8.00 correctly deducted. March premium paid in previous Mar pay period.

Discussion

The scenario purpose was to verify that Global automatically updated pay entitlements based on updating HR Record for a Promotion from Grade E3 to E4. An effective dated HR Promotion action was inserted in PeopleSoft HRMS Job Data to record promotion effective April 5, 2002. The set-ups established for other entitlements and deductions in previous cycles did not have to change for this one.

Because of the database problems encountered as described previously (see Cycle 4, Scenario 2), numerous differences were identified with the Global results in this scenario. Some examples:

Basic Pay: Should have paid \$703.12 (173.80 (4 days at E3) and 529.32 (11 days at E4)) Amount computed is \$721.80 a difference of \$18.68. The period was not prorated and the entire 15 days are computed at the E4 rate.

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O-COLA:

Should have been paid \$309.47 (79.68 (4 days at E3) and 229.79 (11 days at E4)). Amount computed is \$330.67, a difference of \$21.20. The Annual Spendable Income is being retrieved from an incorrect row on the table. It is coming from the row with an Annual Compensation of 33,000 - 35,999, but it should be coming from the row with an Annual Compensation of 30,000 – 32,999. This resulted in a higher daily rate and the entire 15 days were computed at this higher daily rate.

Should have been paid \$309.47 (79.68 (4 days at E3) and 229.79 (11 days at E4)) Amount computed is \$313.33. Cola is still off by 3.88. This is due to the proration for the promotion not being present. The member was paid the E4 rate for the entire 15 days.

The problem with the Annual Spendable Income being retrieved from an incorrect row on the table has been resolved. The problem was the result of the Interpolation method on the Lookup Rules panel of the bracket “BR COLA SI” being set to “Use Next Higher”. This has been reset to “Use Next Lower”.

After at least 13 pay runs for this Scenario the decision was made to reset the data base back to Sunday's status (September 29, 2002) at 2:00 PM. Once the data base problems were resolved, the promotion trigger from Job Data worked and appropriately adjusted the pay entitlements and paid correctly.

3.4.14 Cycle 4 Scenario 4

Synopsis

Marine Corps Reservist reports to Hostile Fire Area effective 29 March 02 and placed into Combat Zone Tax Exclusion (CZTE) Status. Entitlement to Hostile Fire Pay (HFP) begins with arrival.

Objective: Verify system automatically starts entitlement to HFP and pays full rate for month. Computes other entitlements and deductions based on pay rate tables and pro-rates pay for partial month. Adds taxable entitlement to Non-Taxable Earned Income Accumulator for March and 1-15 April pay period.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed location change to Job Data.	✓		HR record now shows member posted to HF Zone, Afghanistan, effective 29 March 02.

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Basic Pay Compensation – \$876.15	✓		\$876.15 correctly pro-rated over 15 days. Previous semi-monthly pay period (15-31 March contains the 29-31 Basic Pay)
Hostile Fire Pay \$75 (1 – 15 April) \$150 (retro to March)	✓		\$75. 00 current month for 1-15 April \$150 Retro Adjustment
Basic Allowance for Subsistence - \$120.80	✓		\$120.80 ½ monthly rate
Basic Allowance for Housing, with Dependent Rate – \$650.00	✓		\$650.00 current month pay calendar
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Reservists not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00	✓		\$16.00 full monthly rate; NOTE - Global Payroll was configured to key from Reserve business unit to take full deduction amount from first payroll of month. This could be resolved by changing the key to "Pay Group" but not followed up in this analysis. Simple setup issue.
Non-Taxable Earned Income Accumulator - \$2035.71		✓	\$1217.97 (\$817.74 difference is Basic Pay for the month of March before 29 March effective of arrival in Hostile Fire Zone. The CZTE accumulator was set up to point only to entitlement beginning with the 29 March date and after.

Discussion

The Reservist continues on active duty for the month of April. During this month there is a retroactive hostile fire pay (HFP) action for March. Member entered Hostile Fire/Combat Zone Tax Exclusion area on 29 March. Both HFP and Combat Zone Tax Exclusion affect the entire

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month. Therefore all March Basic Pay needs to be added to the Combat Zone Tax Exclusion Accumulator, but was not and that accounted for the accumulator difference identified above.

Updated members job data page to show a location change to Afghanistan effective March 29. The Location change was intended as the trigger to start HFP entitlement and CZTE status/accumulator. The data to start the HFP and CZTE is based on PeopleSoft HRMS Location table. The table's Address 3 field was used to indicate whether the location is HFP/CZTE eligible. "CZTE" code indicates Combat Zone Tax Exclusion only; and "HFP/CZTE" indicates entitlement to both HFP and CZTE; "blank" indicates entitlement to neither. In the scenario setup, the location table page for Afghanistan was populated with "HFP/CZTE" to start entitlement to both HFP and CZTE. That together with the effective-dated Job Action for the HFP assignment allowed the trigger to work.

Global results also differed from expected results in the SGLI and the Combat Zone Tax Exclusion accumulator, as explained above in template. SGLI differed in that the full monthly premium was deducted from the 1-15 Apr payroll instead of half of the monthly premium. This was because the Global configuration looks at the Reserve business unit to determine the rate of SGLI to deduct. For a reserve member in a reserve business unit, the full premium is deducted from the first pay of the month. Had Global payroll been configured to key the SGLI deduction rate from the Pay Group, which did change when the member went on long tour active duty, the SGLI premium deduction would have matched the expected results. Combat Zone Tax Exclusion accumulator was set up to include 100% of HFP and other taxable pay only from the effective date of entitlement. This could be reconfigured to obtain the full month's taxable pay in the CZTE accumulator by looking at existing month-to-date pay accumulators.

3.4.15 Cycle 5, Scenario 1

Synopsis

Semi Monthly Pay Calendar for Period 16-30 April 02

Air Force Medical Officer receives a change in BAH from With Dependent Rate to Single Rate based on marriage to Military spouse. Effective date is 20 April 02.

Objective: Verify system automatically BAH entitlement to Single rate, and computes other entitlements and deductions based on pay rate tables and pro-rates pay for partial month.

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Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed location change to Job Data.	✓		HR record now shows member married to military spouse effective 29 March 02.
Basic Pay Compensation – \$1091.55 (15 days)	✓		\$1091.55 (15 days in current calendar)
Medical VSP - \$500	✓		\$500.00 ½ full month non intern rate
Basic Allowance for Subsistence - \$83.18	✓		\$83.185 ½ monthly rate.
Basic Allowance for Housing - \$633.67 With Dependent Rate – \$187.07 (4 days) Without Dependent - \$446.60 (11 days)	✓		\$633.6666667; correctly pro-rated \$187.0666667 \$446.60
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Officer not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$4.00	✓		\$4.00 ½ monthly rate

Discussion

Upon change in Marital Status of the member, from 'Married' to 'Married to Service Member' effective April 20, 2002, BAH entitlement automatically changed from BAH W/Dependents to BAH Single. Inserted an effective dated row of 4/20/2002 with Marital Status Drop Down box selected 'Married To Service Member' to PeopleSoft HRMS PERSONAL DATA, PERSONAL HISTORY page. All pays, allowances and deductions computed correctly except rounding difference on BAS. Previously documented and explained.

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3.4.16 Cycle 5, Scenario 2

Synopsis

A retroactive stop to BAS Discounted Meal Rate deduction is processed effective 2 April 02. This requires a refund of the deduction taken for the period 2 – 15 April 02. The last day, 2 April, will need to refund 75% of the full amount previously collected. That leaves the 25% deduction as required for the last day.

Objective: Verify system automatically stops deduction effective 2 April 02 and refunds amounts collected during the retroactive period as needed. All other entitlements and deduction remain as previously computed, based on pay rate tables and pro-rated pay for partial month.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed a retroactive termination to member Essential Unit Messing (EUM) status..	✓		HR record now shows EUM status stopped as of 2 April 02.
Basic Pay Compensation – \$692.70 (15 days)	✓		\$692.70 on current pay calendar results
Diving Duty - \$170 (15 days)	✓		\$170.00 on current pay calendar results
Basic Allowance for Subsistence - \$120.75 (15 days)	✓		\$120.75 on current pay calendar results
Basic Allowance for Housing, without Dependent Rate – \$244.50	✓		\$244.50; on current pay calendar results
Armed Forces Retirement Home (AFRH) Deduction - \$0.25 (1/2 monthly rate)	✓		\$0.25; on current pay calendar results
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00 (1/2 monthly rate)	✓		\$8.00 on current pay calendar results
BAS Discounted Meal Rate Deduction - \$101.25 (15 days)	✓		\$101.25 on current pay calendar results

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Discussion

The scenario objective was to verify Global retroactively refunds the BAS Discounted Meal Rate Deduction for the period 2-15 April and computes payroll currently. An effective dated HR action was processed to Job Data to terminate Essential Unit Messing status (EUM). The checkbox on PeopleSoft HRMS Personnel Data, Full time Student Field also to be unchecked to indicate member is no longer in EUM status. It took 3 pay runs to get all amounts correct. In the first run, the deduction was not stopped on 2 April and the refund was not processed. PeopleSoft had changed the related field from Smoker Yes/No to the Student field. That had to be changed before the deduction would terminate. Re-ran and it worked correctly.

3.4.17 Cycle 5, Scenario 3

Synopsis

Navy enlisted member receives the initial installment (50%) of a Selective Reenlistment Bonus (SRB). Reenlistment date is 30 April 02 and new Separation Date is 29 April 2006. Years Reenlistment 4 and SRB Multiplier of 3.

Objective: Verify system automatically determines Additional Obligated Service Factor and applies it and SRB Multiplier to compute Initial Installment and subsequent Bonus anniversary amounts. All other entitlements and deductions remain as previously computed, based on pay rate tables and pro-rated pay for partial month.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed reenlistment to Job Data .	✓		HR record now shows new reenlistment date of 30 April 02, 4 year contract.
Basic Pay Compensation – \$721.80 (15 days)	✓		\$721.80 on current pay calendar results
Diving Duty - \$107.50 (15 days)	✓		\$107.50 on current pay calendar results
Selective Reenlistment Bonus - \$360.91 (first installment)	✓		\$360.898356 on current pay calendar results; rounding difference
Basic Allowance for Subsistence - \$48.32	✓		\$48.32. correctly pro-rated for 6 days

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Basic Allowance for Housing, with Dependent Rate – \$260.00	✓		\$260.00; correctly pro-rated for 11 days
Dependent Overseas COLA - \$313.34 (15 days)	✓		\$313.35; on current pay calendar results; rounding difference
Overseas Housing Allowance - \$841.30 (15 days)	✓		\$841.30; on current pay calendar results
Armed Forces Retirement Home (AFRH) Deduction - \$0.25 (1/2 month rate)	✓		\$0.25; on current pay calendar results
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00 (1/2 month rate)	✓		\$8.00 on current pay calendar results

Discussion

The main purpose was to verify Global automatically computes Selective Reenlistment Bonus and payroll. The initial intent was to use PeopleSoft HRMS Contract Data-to establish member's enlistment and reenlistment, and to compute additional obligated service. Also, the Shift Rate field was used to report and hold the SRB multiplier. Initial set-up intended to use contract data as trigger of SRB did not work. This is part of Trigger Gap identified and documented in full in Parts I-V of this report. The alternate solution, as with other scenarios, was to insert an effective dated HR action on PeopleSoft Job Data to create a manual trigger for new contract. That worked. The Global results leading up to the final run included ongoing differences OHA and O-COLA amounts. This is attributed to continuing required adjustment to the formulas as scenario specifics change. The last run got the amounts correctly.

3.4.18 Cycle 5, Scenario 4

Synopsis

Marine Reservist separated from Active Duty, effective 29 April 02, and returned to Inactive Reserve status effective 30 April 02. All entitlements and deductions suspended and CZTE status stopped effective 29 April.

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Objective: Verify system automatically updates HR record stop Active Duty and set Inactive Reserve status. Prior to 29 April system automatically computes Basic Pay, BAS, BAH and Hostile Fire Pay Tables and pro-rates as needed for partial months.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed status change to Inactive Reserve on Job Data.	✓		HR record now updated to show Reserve status as of 30 April 02
Basic Pay Compensation – \$817.74 (16-29 April)	✓		\$817.74 on current pay calendar results
Hostile Fire Pay - \$75 (1/2 month rate)	✓		\$75.00 on current pay calendar results
Basic Allowance for Subsistence - \$112.75 (16-29 April)	✓		\$112.70 correctly pro-rated for 14 days on current month calendar results
Basic Allowance for Housing, with Dependent Rate – \$606.67 (16-29 April)	✓		\$606.66667 correctly pro-rated for 14 days on current month calendar results
Armed Forces Retirement Home (AFRH) Deduction - \$0.00	✓		\$0.00; Reservists not subject to AFRH
Servicemembers Group Life Insurance (SGLI) Deduction - \$8.00 (1/2 month rate)	✓		\$8.00 on current pay calendar results
Non-Taxable Earned Income Accumulator - \$2928.45		✓	\$2110.71; \$817.74 difference is explained above in Cycle 4

Discussion

The reservist continues on active duty through April 29th when member transitions back to a drilling reserve status, effective 30 April. Member's last day of active duty was April 29, the same day member returned home from Afghanistan. Member rates 14 days of pay (April 16-29), including basic pay BAH, BAS, and HFP. Pay is still nontaxable due to duty in CZTE area during April.

The stop to HFP and CZTE status worked as intended. One problems was noted with SGLI as follows:

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SGLI differed in that no part of the premium was deducted in the second payroll of the month. This issue was addressed in scenario 4.5 when the full monthly premium was deducted from the 1-15 Apr payroll instead of half of the monthly premium. This was because the Global configuration looks at the business unit to determine the rate of SGLI to deduct. For a reserve member in a reserve business unit, the full premium is deducted from the first pay of the month. Had Global payroll been configured to key the SGLI deduction rate from the pay group, which did change when the member went on long tour active duty, the SGLI premium deduction would have matched the expected results. This is a good example of a set-up issue, initially established to address the specifics of only one scenario, and then does not satisfy the specifics of subsequent one. See comments about up-front design in Part VII of the report.

3.4.19 Cycle 6, Scenario 1

Synopsis

Semi-monthly Pay Calendar 1-15 May 02.

Retroactive hire of the Air Force Medical Officer, effective 31 March 02. System will compute entitlements and deductions from Hire date through current pay period end date. The retro period will include anniversary date longevity increase for both Basic Pay and a Medical Years Service date for Medical VSP.

Objective: Verify that system can determine eligibility and compute retro active and current period payroll amounts. Computation determines pay rates based on pay tables and pro-rates for partial months where needed. Used both Forwarding and Corrective Methods of Retroactive processing.

Expected Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed hire action to Job Data. effective back to 31 March 02	✓		HR record now shows member hired effective 31 March 02, Medical Service Date of 30 April 96, Non-intern, Married to Service spouse.

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Basic Pay Compensation March \$0 April \$2154.60 May \$1091.55	✓		\$0 March Pay Calendar \$2154.60 April Pay Calendar \$1091.55 May Pay Calendar
Medical VSP March \$0 April \$436.10 May \$500	✓		\$0 March Pay Calendar \$436.1 April Pay Calendars \$500 May Pay Calendar
Basic Allowance for Subsistence March \$0 April \$166.37 May \$83.19	✓		\$0 March Pay Calendar \$166.37 April Pay Calendar \$83.185; May Pay Calendar (rounding difference)
Basic Allowance for Housing, March \$0 April \$1218.00 May \$609.00	✓		\$0 March \$1218 April \$609 May
Servicemembers Group Life Insurance (SGLI) March \$8 April \$8 May \$4		✓	\$8 March (arrears) \$12 April (See below for analysis and recommendation) \$4 May
SGLI Accumulator - \$20 (\$8 for March; \$8 for April; and \$4 for May)		✓	\$16 (\$12 for April and \$4 for May) See below for analysis and recommendation

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Gross Pay Accumulator - \$6258.81	✓		\$6258.809666 (rounding)
Net Pay Accumulator – \$6238.81		✓	\$6248.81 (difference is above \$4 difference in the SGLI accumulator)

Discussion

Pays and Allowances computed correctly for each semi-monthly pay period for the entire period (retroactive and current) in question. Global correctly established an \$8.00 SGLI arrears for March when no pay was disbursed.

However as described below accumulator treatment under both methods is inconsistent and questionable. This has accounting and tax reporting implications and in this scenario appears to have contributed to the SGLI differences identified above. Additional future testing and analysis is required.

SGLI Differences

April Deduction: During the month of April Global collected \$12 while Expected Results correctly showed \$8. The \$4 difference appears to be tied to the Global Formula (TEST RSVSGLI), how it works for the second pay period of the month, and the fact that Global retroactive processing, neither method, does not update accumulators in the Results Calendars for those prior periods. For example for the second pay period of April, the formula took the basic monthly premium of \$8 and subtracted the MTD accumulator amount of \$0. That yielded the \$8 deduction which together with the \$4 from the first pay period of the month gave a total of \$12 per month. If the accumulator had been updated correctly to reflect the \$4 from the first half of April then the second pay period deduction would have been correct at \$4, and the total monthly amount would have agreed.

SGLI Accumulator: The difference of \$4 relates to the \$8 arrears that did not get included in the Global accumulator and the additional \$4 that Global added from April per above.

Retroactive Processing; Forwarding Method vs. Corrective Method; Adjustments and Accumulators

The team ran 2 payrolls to compare the Global Forwarding method to the Corrective method of retroactive processing. The pay item chosen for comparison was Medical Variable Special Pay (VSP). The team reviewed the following to determine acceptability of results:

- ◆ **Retroactive Adjustments.** Under the Forwarding method, Global computed all prior period Medical VSP adjustments and forwarded them for display in the current period Results Calendar under “Retro Adjustments.” The Corrective method computed the VSP amounts

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and posted them for display in the impacted prior pay period Results Calendar as part of current Earnings and Deductions. This is consistent with our understanding of the 2 methods, as follows:

- “Retro Adjustments” Tab per current Results Calendar for pay period 1-15 May 02
- Forwarding = \$3987.074666
- Corrective = \$3550.97
- Difference = \$436.104666 (Medical VSP \$208.33 for 1-15 April and \$227.774666 for 16 – 30 April verified to 1-15 and 16-30 Results Calendars, respectively).
- Accumulators. Under the Forwarding method, Global added all prior period Medical VSP adjustments and forwarded them for display in the current period Results Calendar under “Accumulators”. The Corrective method added only the current pay period medical VSP amounts to accumulator. As follows:
- “Accumulator” Tab- Gross Pay per current Results Calendar for pay period 1-15 May 02
- Forwarding = 6258.809666
- Corrective = 5822.705
- Difference = 436.104666 (Medical VSP for April pay calendars)
- “Accumulators” Tab - Medical VSP per current Results Calendar for pay period 1-15 May 02
- Forwarding = \$936.104666
- Corrective = \$500 (current pay period VSP)
- Difference = \$436.104666 (Medical VSP for April pay calendars)

The above is consistent with the PSC-provided explanation of the difference between the 2 methods. Our analysis however identified some questionable treatment of accumulators that need to be further analyzed in future phases of analysis.

- ◆ System-delivered accumulators for prior period pay calendars show \$0 balances. Neither method apparently updated them. The lack of update, as explained above, contributed to SGLI computation error. Also the Medical VSP amounts for April, which were not captured in current Results Calendar accumulators, did not get captured for the prior periods either. That could have tax reporting implications if the accumulator balances are selected as the basis for W-2 and other such reporting.
- ◆ User-developed accumulators for prior period pay calendars show correct balances. Both methods apparently updated them as needed.
- ◆ The SGLI accumulator balance for both Forwarding and Corrective methods is \$16. This is for April amount of \$12 and May amount of \$4. Therefore neither method included arrears

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balances in accumulator balances; only the paid—actually collected—amounts. A possible solution to also capture the arrears could be to modify the SGLI computation to look for outstanding arrears balances and add any outstanding amount to arrive at the total pay period deduction amount.

3.4.20 Cycle 6, Scenario 2

Synopsis

Semi-monthly Pay Calendar 1-15 May 02.

To test checking multiple factors to determine eligibility for Diving Duty pay. Member was accessed 1 March 02. From accession date through current pay period, the member successfully completes the 6 dives needed to qualify for Diving Duty pay. Global will Diving Duty amounts due for the current pay period of 15 May 02. The member has a Diver Rating of Master and completes the 6 dives on 5 May 2002. Assigned to Diving Billet at Camp Cowboy, TX.

Objective: Verify that system can determine eligibility and compute correct payable amount of Diving Duty pay based on the presence of competency, number of dives performed, assignment to a qualifying billet and a diver rating. Computation determines pay rates based on pay tables and pro-rates for partial months where needed.

Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed Diver Rating, # of Dives and Duty assignment to member HR record.	✓		HR record shows 6 dives completed and Master Rating as of 5 May 02.
Basic Pay Compensation	NA		
Diving Duty - \$170.00 (11 days @ \$11.33)	✓		\$170.00 1-15 May Global Pay Calendar
Basic Allowance for Subsistence	NA		
Basic Allowance for Housing	NA		
Armed Forces Retirement Home (AFRH) Deduction	NA		
Servicemembers Group Life Insurance (SGLI) Deduction	NA		

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Discussion

The objective of this scenario was to create a more true-to-life test situation for Diving Duty Pay eligibility by checking multiple fields for eligibility. Global Payroll had to verify the member was in a diving billet; had a diver's Military Occupation Specialty (MOS); had the correct number of dives to maintain rating and correct number of dives for pay; and had the diver competency and rating on the record. The process of verifying the number of dives to maintain the rating (4 in 6 month period) and verifying the number of dives to receive pay (2 per qtr), was a proof of concept that was not verified in any of the previous scenarios.

On the PeopleSoft HRMS Competency page, data was entered to denote the member has a Diver Competency; the Proficiency Level was used to denote "Master Diver" rating. The position number on the PeopleSoft HRMS Position table, and the MOS on the Job Code table were identified as a diving duty position and diving MOS by the use of an indicator. The PeopleSoft HRMS record does not have a record or field to maintain a member's dives. This is part of the overall data gap due to not being able to create new screens and fields for this analysis. Thus the PeopleSoft HRMS Absence record was used to record the dives for this scenario. The dives were entered on the Absence table and were dated so they could be verified and counted to determine if eligible for pay. The Pro-Ration rule used for all other pay types in previous scenarios was not used for this Diving Duty pay. A formula was created for Pro-ration for Diving Duty pay for this scenario. It was required by the "rolling" 2 month-period during which the member must complete 2 dives to get paid in the current period. PSC labeled this the "rolling calendar rule." In subsequent phases of analysis need to review all pays and allowances to determine which if any might require specialized pro-ration rule

Global did not compute Diving Duty pay on the first payroll run for this scenario. The reason was that the eligibility formula to count the member dives performed was looking for 6 dives. Only 4 dives were entered on record, so Global did not pay the member Diving Duty Pay. The formula was changed to look for 4 dives. The next run Global computed the correct amount.

Global did perform the process as it was set up to do, with second run adjustment as described above, but this was a limited test. It was all inclusive of the process that would need to exist within the live environment.

3.4.21 Cycle 6, Scenario 3

Synopsis

Semi-monthly Pay Calendar 16 - 31 May 02.

Current month accession for Navy enlisted member, effective 28 May 02. Pay Grade of E3, Basic Pay date of 28 February 02; Government quarters not assigned; civilian spouse; Essential Unit Messing status; and \$200,000 SGLI election.

Objective: Verify system automatically starts pays and entitlements on accession, determines pay rates based on pay tables and pro-rates for partial months where needed.

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Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Processed Hire action to access member.	✓		HR record now shows member accessed effective 28 May 02, with personnel and pay statuses described above in the scenario synopsis.
Basic Pay Compensation \$130.35 (3 days 28-31 May)	✓		\$130.35 correctly pro-rated for 3 days per Global 16-31 May Pay Calendar
Enlisted Basic Allowance for Subsistence - \$24.15 (3 days 28-31 May)	✓		\$24.15 correctly pro-rated for 3 days per Global 16-31 May Pay Calendar
Basic Allowance for Housing, with Dependent Rate – \$70.40 (3 days 28-31 May)			\$96.50; See explanation for difference in discussion below
Armed Forces Retirement Home (AFRH) Deduction - \$0.50 full month rate	✓		\$0.50; full month rate per Global 16-31 May Pay Calendar
Servicemembers Group Life Insurance (SGLI) Deduction - \$16.00 full month rate	✓		\$16.00 full month rate per Global 16-31 May Pay Calendar
BAS Discounted Meal Rate Deduction - \$21.94 \$1.69 (28 May) \$20.25 (29-31 May @ \$6.75	✓		\$21.937 rounding difference; per Global 16-31 May Pay Calendar

Discussion

As noted above in the Scenario Synopsis, the scenario purpose was to demonstrate the hire process of a Navy Enlisted member, pay grade E3, with no prior service. Member's duty assignment is DFAS-Cleveland, and his dependents reside in Ft. Hood, Texas. Effective Date of Hire is May 28, 2002. This cycle was processed to demonstrate whether re-configured set ups

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for Global Payroll processes that occurred during cycles 1 through 5 would still determine eligibility and compute pay accurately.

With the Hire Action, the following occurred:

- Basic Pay, Basic Allowance for Subsistence, and Basic Allowance for Housing with Dependents are initiated automatically.

- With Hire Action, SGLI deduction is recorded for automatic deduction. Armed Forces Retirement Home deduction is also automatically established.

- A separate PeopleSoft HRMS job action was recorded to establish Basic Allowance for Subsistence Discounted Meal Rate Deduction.

As noted in the template above, there was a Basic Allowance for Housing difference. The member should have received \$70.40, which is 3 days at Grade E3 w/dependents rate of \$704 per month. Global computed \$96.50, which is 3 days at Grade E4 w/o dependents rate of \$965. The difference was traced to two factors, both correctable, as follows:

Dependents. The formula for BAH dependents had been reconfigured since Cycle 1, which resulted in a result of "0 dependents". The previous formula properly authorized BAH whether dependents did or did not have same address as the member. The modified formula was designed to accommodate O-COLA where the dependents must be Command Sponsored. In that case the eligibility determination process looked at the PeopleSoft HRMS Same Address as Employee field. Because the dependents in this scenario resided in Texas the formula returned zero dependents. Had the original formula been left in place and just added a second dependent, the combination of both would returned the with dependents status.

Rate. The Bracket BRA BAH Rates was also modified for interpolation method " Use next higher", resulting in the formula obtaining the E4 rate of BAH, without dependents.

3.4.22 Cycle 6, Scenario 4

Synopsis

Weekly Pay Periods 1 – 7 May; 8-14 May; 15-21 May; 22-28 May; and 29 May – 4 June 02

Marine Reservist performed a combination of IDT and Short Tour Active Duty drills over the 5 weekly pay periods.

Objective: Verify system automatically started entitlements and deductions associated with each tour, and computed rates based on pay tables and pro-rated for partial periods where needed.

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Expected and Actual Results

Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Drill performance was reported using PeopleSoft Global Positive Input.	✓		1-7 May – 2 IDT units on 4 - 5 May. 8-14 May - 2 IDT units 10 May; 1 IDT Unit 14 May; and Short Tour 11-14 May. 15-21 May: no activity 22-28 May: no Activity Short Tour from 31 May to 4 Jun.
Basic Pay Compensation – 1-7 May 02 - \$233.64 (2 IDT drills per day on May 5 –6 @ 58.41 per drill) 8-14 May 02 - \$233.64 (4 days Short Tour @ 58.41) \$116.82 (2 IDTs @ 58.41) 15-21 May 02 - \$0.00 22-28 May 02 - \$0.00 29 May – 4 June 02 - \$292.05 (4 days Short Tour @ 58.41)	✓ ✓ ✓ ✓		\$233.64 Pay Calendar shows 2 IDT units input and paid @ \$116.82 per day \$233.64 Pay Calendar shows Basic Pay < 30 days + \$58.41 IDT (SEE EDIT NOTE BELOW for \$58.41 difference) \$175.23 Pay Calendar shows payment for 3 IDT units (SEE INPUT EDIT NOTE BELOW for \$58.41 difference) \$0.00 \$0.00 \$292.05 Pay Calendar shows Basic Pay < 30 days
Basic Allowance for Subsistence – 1-7 May 02 - \$0.00 8-14 May 02 - \$32.21 15-21 May 02 - \$0.00 22-28 May 02 - \$0.00 29 May – 4 June 02 \$40.26 (5 days)	✓ ✓ ✓ ✓ ✓		\$0.00 \$32.21 per Pay Calendar \$0.00 \$0.00 \$40.26 per Pay Calendar

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Expected Results	Acceptable Actual Results		Global Results/Remarks
	YES	NO	
Basic Allowance for Housing			
1-7 May 02 - \$0.00	✓		\$0.00
8-14 May 02 - \$128.67	✓		\$128.67 per Pay Calendar
15-21 May 02 - \$0.00	✓		\$0.00
22-28 May 02 - \$0.00	✓		\$0.00
29 May – 4 June 02 \$160.83	✓		\$160.83 Per Pay Calendar
Servicemembers Group Life Insurance (SGLI) Deduction – \$0.00 election none for all periods	✓		\$0.00 SGLI election none for all periods.

Discussion

This scenario was added to verify that the setup configuration used to pay drill period and short tour active duty were not affected by later configuration changes required to support pay entitlements and test situations addressed in later cycles. This scenario involved hiring a new member, processing drill and short tour active duty over 5-weekly payroll cycles beginning 1 May 02 and ending 4 June. The member was hired using standard People Screens. Participation in drill and short tour active duty was entered using PeopleSoft positive input functionality. Drills were input as units. Short tour active duty was entered as “element overrides” for the first and last day of duty.

Pay Cycle May 1-7: Member was successfully hired. Global Payroll computed pay for 2 drills on May 4 and 2 drills and May 5. No SGLI was deducted because member was hired with SGLI election of None. Computations matched expected results. This payroll proved that Global Payroll can pay multiple drills for multiple days during the pay cycle.

Pay Cycle May 8-14: Global Payroll credited pay for the 3 drills entered for May 10. There is no edit in Global Payroll to prevent payment for more than 2 drills on a calendar. This requirement can be added using delivered formula functionality. Global Payroll credited pay and allowances for short tour active duty May 11–14. Results for basic pay, BAS, and BAH matched expected. Global Payroll credited pay for drill period reported for May 14, a day for which the member also received active duty pay. This demonstrates that edits will need to be developed to prevent payment for drill and active duty on the same calendar day. Delivered functionality to develop formulae should satisfy the requirement. This payroll proved that Global Payroll has the capability to pay multiple drill periods and short tour active duty during the same pay cycle.

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NOTE INPUT EDIT: Edits will need to be added to prevent more than 2-drills per calendar day and to prevent payment for drill and active duty on the same calendar day. Global Payroll delivered functionality should provide the tools to develop the edits.

Pay Cycle May 15-21: No positive input entered and no pay was generated. This payroll shows that Global Payroll will not generate pay without positive input for members that do not receive continuous pay.

Pay Cycle May 22-28 May: No positive input entered and no pay was generated. This payroll shows that Global Payroll will not generate pay without positive input for members that do not receive continuous pay.

Pay Cycle May 29 – June 4: Short tour active duty was reported for the period May 31 through June 4. Computed results matched expected results. This scenario was developed to show how Global Payroll would compute short tour active duty which included the 31st day of the month. Expectations were successfully met.

This scenario fully exercised Global payroll's capabilities to accept positive input and compute pay for drills and short tour active duty. Global Payroll fully supported the expected results for the scenario and, depending on future configuration, it could potentially support the needs to compute military pay for inactive and active duty training.

3.5 DIMHRS Issue Resolution Process Issues

The following section contains a summary of the major DIMHRS issues that the Global Analysis Team generated during global analysis.

Prorating Monthly Entitlements: All monthly military pays and allowances must be prorated for periods of service or periods of entitlement less than 30 days. For Active and Reserve members with a period of obligated service of 30 or more days, monthly entitlements must be prorated based on a 30 day month and the number of days actually served during the month. Proration of monthly entitlements for Reserve members performing Inactive Duty Training or Short Tours (periods of obligated service less than 30 days) is on the total number of days served during the month. These are paid on a day-for-day basis. Proration is also required if one or more of the factors used to compute variable rate pays change during the month.

Prorating Monthly Deductions: Most service members have several deductions taken from their pay each pay period to include taxes, debts, allotments, Armed Forces Retirement Home and Servicemen Group Life Insurance. PeopleSoft prorates all deductions while military deductions are not prorated. Using PeopleSoft, if the Active Duty member enters service after mid-month payroll or separates before mid-month, only one-half of the deduction would be made. This problem is compounded for Reserve members who are paid multiple times per month. Additionally, PeopleSoft does not handle retroactive collections. For example, a member drills in Feb, but did not drill in Jan, the systems must automatically collect SGLI premiums for January and February when the member is paid in February.

Automating Pay Triggers and Eligibility Validation: Unlike the current legacy military payroll systems, which automatically adjust a member entitlements based upon the contents of the personnel record, very few PeopleSoft personnel events automatically trigger adjustments to pay entitlements. Additionally, PeopleSoft Payroll for North America does not perform eligibility validation. The system does not prohibit the start of an entitlement for which a member is not eligible nor does the system automatically stop entitlements when a member's eligibility ends.

Retroactive Processing: Retroactive processing is required in a wide variety of circumstances such as legislative or regulation changes, late reporting of personnel actions, errors in reporting, and timing required to meet Federal Reserve payroll processing windows. Current military pay systems have automated 12-month retroactive payment processing capability in order to minimize manual workload and expedite payment to the military member. While PeopleSoft has retroactive payment processing, it is manually intensive and not comprehensive. In contrast to current military pay capabilities, PeopleSoft requires an individual input for pay entitlements affected by a retroactive event such as demotion. In some cases, PeopleSoft cannot process retroactive payments at all due to lack of prior pay cycle information.

3.5.1 Implementation Issues

- **Technical Gaps**

Segmentation Triggers for Changes to System Tables: Global Payroll allows adding a Trigger only to Employee level tables. Tables that affect multiple employees do not generate Segmentation Triggers. For example, Salary tables or COLA index rate tables do not generate a Trigger. This means that the entire pay period is paid at that same rate for that entitlement. This would cost the government significant money each time a pay increase is implemented at a date other than the beginning of a pay period. This can be solved through customization using an SQR.

- ◆ **Trigger capability on additional tables:** The Peoplecode required to fire Global Payroll Triggers is delivered on less than 10 HRMS tables. This capability will be required on virtually all, pay-related tables, e.g., Competencies.
- ◆ **Combination Triggers:** There were times during the evaluation when it would have been useful to build a Trigger on a combination of fields. E.G., Peoplesoft HR frequently uses both the Action and Action_Reason fields in combination for events such as a Transfer or Data Change. The combination of these fields will be unique, but a single field will not be. Since Global Payroll does not allow creation of combination Triggers, some Triggers will be initiated unnecessarily.

3.6 Data Assessment

There are a number of underlying data gaps in the Peoplesoft HRMS product, some of which are identified in the in Executive Summary, Analysis Results – Summary by Category of this document. These data gaps must be resolved prior to implementation. JR&IO is working on an

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exhaustive analysis of all data requirements to identify all data gaps. A summary list of the Data Gaps identified in this analysis are as follows:

System-Level Elements

- ◆ BAH Type I setup table
- ◆ BAH Type II setup table
- ◆ COLA Index Rate table
- ◆ COLA Average Annual Spendable Income table
- ◆ COLA Annual Compensation Rate table
- ◆ Salary Step field does not allow Step 0 (Less than 2 years service)
- ◆ Salary Step field not based on Months in Service (i.e. E1 w < 4 mos service)
- ◆ BAS Rate table
- ◆ EUM Daily Rate field
- ◆ Military Housing Area field
- ◆ JFTR Location Code field
- ◆ Hostile Fire Pay field
- ◆ OHA Rental Ceiling Tables
- ◆ OHA Utility Ceiling Tables

Employee-level Data Elements

- ◆ Medical Service Date field
- ◆ Internship field
- ◆ Command Sponsorship field
- ◆ Effective Date on Dependent Beneficiary Table

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SECTION 4

4. CONCLUSIONS

The PeopleSoft Global Payroll functionality supports an integrated personnel and pay environment. Global Payroll is a rules based system with user-defined triggers, segmentation, formulas, arrays and brackets to define and support military pay authorization and computation rules. Processing rules can be defined to automatically start, stop and change pay earnings and deductions based on personnel events or data changes. Computation rules can be constructed to support 30-day proration rules for different active duty periods and Reserve Inactive Duty Training. Global Payroll also supports retroactive payments, accumulators and pay changes based on service date anniversaries. Several gaps were identified and discussed in the Report and include pay triggers, retroactivity, and data edits or validation. These gaps are easily fixed using PeopleSoft utilities such as mass change or batch processing, or PeopleSoft developmental tools such as PeopleCode, PeopleTools and Application Engine. Several processes to include the DC II interface, benchmarking, system internal controls, and functionality to be included in the Global Payroll US Country Extension requires further analysis to determine if these processes meet DoD performance, system and functional requirements and standards.

4.1 Additional Product Features Desired

- ◆ **Dynamic flowchart tool:** This tool should graphically displays programming logic in a flowchart format. The Element Relationship tool is useful, but does not show all inputs and outputs to an object nor does it show assignment to variables in all cases.
- ◆ **Element Names of at least 30 characters:** This is an important feature for accomplishing configuration management during product development.
- ◆ **Additional functions for creating Formulas:** The formula creation tool creates SQL statements, however, it allows use of only 12 functions or operators. Allowing use of more SQL functions would allow faster development and lower development costs. For example, because there are no string conversion functions, it was necessary to create brackets or use hard code values to accomplish string conversion.
- ◆ **Ability to edit Formulas from the View screen:** This will allow experienced developers to enter and edit formulas more quickly.
- ◆ **Additional System Elements:** Global Payroll has delivered several System Elements, which are easily retrieved by a developer for use in programming. For example, an employee's Grade is a System Element. If a data element is not a system element, more programming steps are required to retrieve it.
- ◆ **Additional Calculation Types:** Calculation Types in Global Payroll are required to run a programming process. Global Payroll currently has two delivered Calculation Types, Payroll and Absence Processing. If there were an additional calculation type, or if users could add a

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calculation type, the Global Payroll tools could be used to satisfy more of the DoD requirements. For example, it could be used to create an Eligibility Calculation Type, which would focus just on Eligibility for a pay entitlement. This processing could then take place apart from the normal payroll processing, thereby reducing run time of the actual payroll.

- ◆ **Ability to sort results of a search on multiple fields:** In the final DIMHRS solution, there will be thousands. Currently, when a programmer is searching for an existing elementf

4.2 PeopleSoft Ongoing Development

The following items which were identified during the analysis will be applicable to all future DoD development done in Peoplesoft.

- ◆ **Use custom fields and tables when appropriate:** Peoplesoft delivers an arsenal of sophisticated tools that allow ease of customizing the HRMS product where applicable. These include Application Designer, Application Engine, Peoplecode, and the SQR programming language, as well as a tool for managing these changes during the upgrade process. When a field or table is needed for a DoD unique element, it can be added using Application Designer as an option to forcing a fit into a delivered field. Approximately 50% of the programming effort needed during this analysis could have been eliminated by adding the needed fields. Doing this will save development and maintenance time through the life cycle of the product.
- ◆ **Minimize use of Variables:** Take advantage of Global Payroll's ability to pass the results of a formula, array, or bracket directly to another program element without passing it to a variable first. Using unnecessary variables will complicate development and increase development and maintenance costs. This is particularly true because variable names are limited to 18 characters.
- ◆ **Identify source of a Variable in the Description field:** For certain uses of Variables, it is difficult to identify the source of a Variable in Global Payroll. For example, if a variable is overwritten in a formula or populated by an array, that relationship may not appear on the "Uses" tab of the View Element Relationship screen for the Variable. Including the source of the Variable in the Description field will help alleviate this problem.
- ◆ **Do not use delivered temporary Variables in Arrays and Brackets or for Formula results:** Peoplesoft delivers some temporary elements, such as GP Temp 001 Date, for use as temporary variables. These should not be used in Arrays or Brackets because of the confusion it causes for Configuration Management. These variables should only be used internally in formulas to reduce the need for creating additional variables.
- ◆ **Establish Configuration Management rules before programming:** This should include a standard for naming elements, maximizing use of System Elements, when to use Brackets, etc. If Peoplesoft provides the rules used for development of the country extensions to Global Payroll, they could be used as a basis for developing the rules.

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- ◆ **Technical resources needed for programming:** Global Payroll is a powerful, rapid, application development tool. However, technical resources are needed for doing the programming. Functional experts probably cannot do all the work themselves.

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SECTION 5

5. REFERENCES

The following references provided guidance for the Global Payroll Analysis:

- ◆ Clinger-Cohen Act, 1996
- ◆ DIMHRS PeopleSoft HRMS Implementation Planning and Strategy Workshop Project Charter, May 2001
- ◆ DIMHRS COTS HRMS Initial Analysis Plan, May 2001.

Table 5-1 cites the primary DIMHRS (Pers/Pay) program documents in the DIMHRS (Pers/Pay) Configuration Management (CM) Library, which were used in the development of the DIMHRS Global Payroll Analysis Final Report.

Table 5-1. Program Documents

CM Library Reference	Document	Date
N/A	Function, Process, and Activity (FP&A) Report	October 1999
QMNS_010	Mission Need Statement (MNS)	24 February 1998
QORD_003	MJI Operational Requirements Document (ORD)	April 2001
QORDN001	DIMHRS Performance Characteristics (Draft) (Non-Functional Requirements – (NFR))	09 Jan 2000